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Version: 2019-01

BARE OVERHEAD CONDUCT-ORS

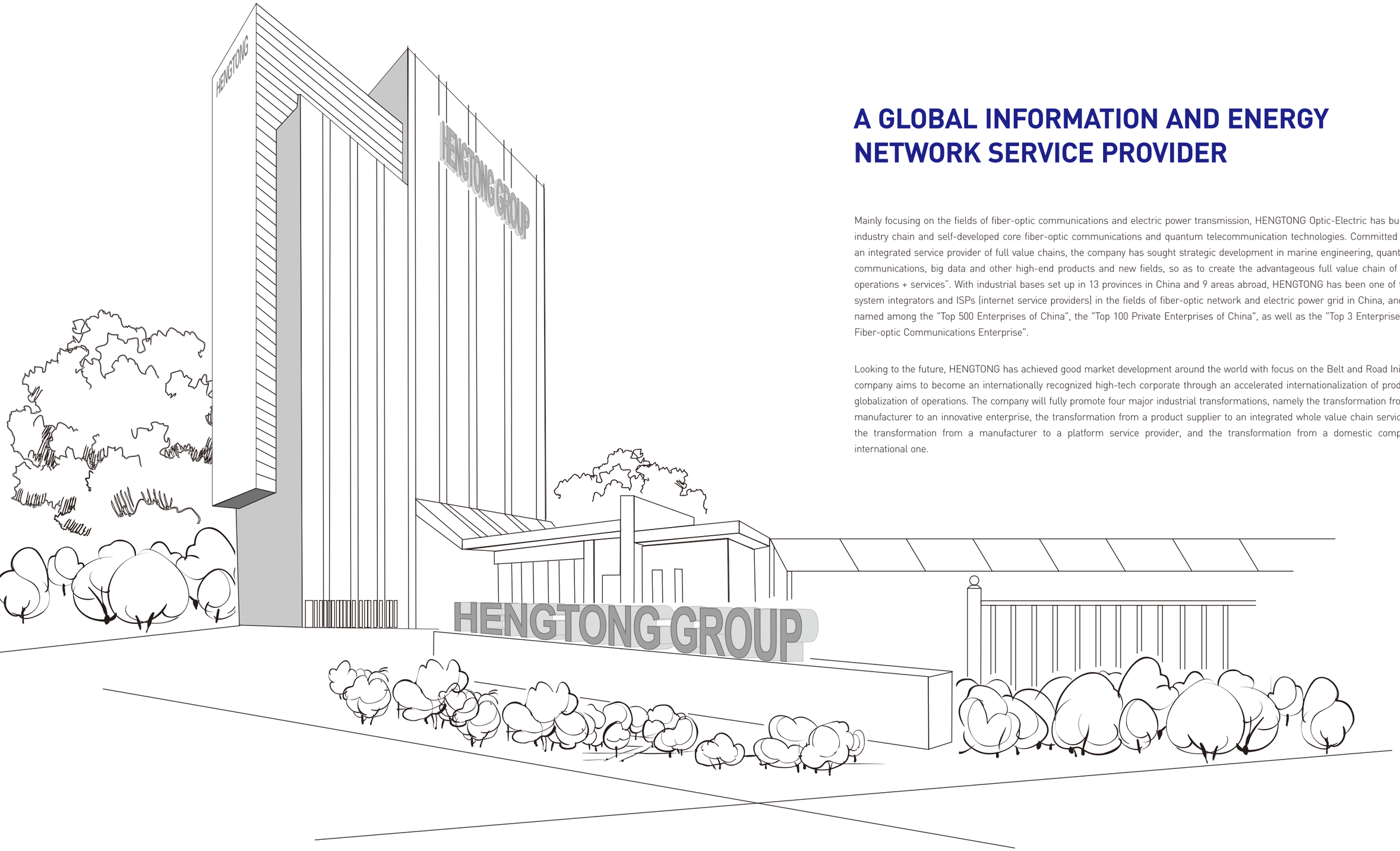


HENGTONG OPTIC-ELECTRIC
A Global Information and Energy Network Service Provider



Introduction

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A GLOBAL INFORMATION AND ENERGY NETWORK SERVICE PROVIDER

Mainly focusing on the fields of fiber-optic communications and electric power transmission, HENGTONG Optic-Electric has built up a full industry chain and self-developed core fiber-optic communications and quantum telecommunication technologies. Committed to building an integrated service provider of full value chains, the company has sought strategic development in marine engineering, quantum secure communications, big data and other high-end products and new fields, so as to create the advantageous full value chain of "product + operations + services". With industrial bases set up in 13 provinces in China and 9 areas abroad, HENGTONG has been one of the leading system integrators and ISPs (internet service providers) in the fields of fiber-optic network and electric power grid in China, and has been named among the "Top 500 Enterprises of China", the "Top 100 Private Enterprises of China", as well as the "Top 3 Enterprises of Global Fiber-optic Communications Enterprise".

Looking to the future, HENGTONG has achieved good market development around the world with focus on the Belt and Road Initiative. The company aims to become an internationally recognized high-tech corporate through an accelerated internationalization of production and globalization of operations. The company will fully promote four major industrial transformations, namely the transformation from an R&D manufacturer to an innovative enterprise, the transformation from a product supplier to an integrated whole value chain service provider, the transformation from a manufacturer to a platform service provider, and the transformation from a domestic company to an international one.



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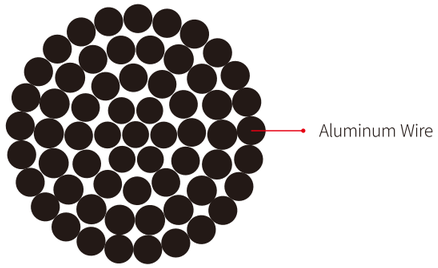
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All aluminum conductors (AAC)

Standards: IEC . ASTM . EN





Application

It is used for overhead power transmission and distribution line.

Construction

Stranded with hard-drawn aluminum wires

Features

Conductor have no hysteresis losses, The power loss of transmission line is reduced effectively. The structure of single metal avoids the electro-chemical reaction that will happen in the thermometal, so conductors will have a longer service life.

Description

Technical details I EC 61089

Code number	Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
-	mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
10	10	7/1.35	10.02	1.95	2.8634	4.05	27.4
16	16	7/1.71	16.08	3.04	1.7896	5.13	43.8
25	25	7/2.13	24.94	4.50	1.1454	6.39	68.4
40	40	7/2.70	40.08	6.80	0.7159	8.10	109.4
63	63	7/3.39	63.18	10.40	0.4545	10.17	172.3
100	100	19/2.59	100.10	17.00	0.2877	12.95	274.9
125	125	19/2.89	124.64	21.25	0.2302	14.45	343.6
160	160	19/3.27	159.57	26.40	0.1798	16.35	439.8
200	200	19/3.66	199.90	32.00	0.1439	18.30	549.7
250	250	19/4.09	249.63	40.00	0.1151	20.45	687.2
315	315	37/3.29	314.55	51.98	0.0916	23.03	867.9
400	400	37/3.71	399.98	64.00	0.0721	25.97	1102.0
450	450	37/3.94	451.11	72.00	0.0641	27.58	1239.8

Code number	Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
-	mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
500	500	37/4.15	500.48	80.00	0.0577	29.05	1377.5
560	560	37/4.39	560.04	89.60	0.0515	30.73	1542.8
630	630	61/3.63	631.30	100.80	0.0458	32.67	1738.3
710	710	61/3.85	710.14	113.60	0.0407	34.65	1959.0
800	800	61/4.09	801.43	128.00	0.0361	36.81	2207.3
900	900	61/4.33	898.25	144.00	0.0321	38.97	2483.2
1000	1000	61/4.57	1000.58	160.00	0.0289	41.13	2759.1
1120	1120	91/3.96	1120.79	179.20	0.0258	43.56	3093.6
1250	1250	91/4.18	1248.78	200.00	0.0231	45.98	3452.6
1400	1400	91/4.43	1402.62	224.00	0.0207	48.73	3866.9
1500	1500	91/4.58	1499.21	240.00	0.0193	50.38	4143.2

Technical details ASTM B231

Code number	Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
-	mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
Bitterroot	2750000	91/4.42	1396.29	205	0.0208	48.62	3890
Lupine	2500000	91/4.21	1266.77	186	0.0229	46.31	3529
Sagebrush	2250000	9ia99	1137.83	167	0.0255	43.89	3170
Cowslip	2000000	91/3.77	1015.82	149	0.0283	41.47	2803
Jessamine	1750000	61/4.30	885.84	132	0.0324	38.70	2444
Coreopsis	1590000	61/4.10	805.36	120	0.0357	36.90	
Gladiolus	1510500	61/4.00	766.55	114	0.0375	36.00	2115
Carnation	1431000	61/3.89	724.97	108	0.0396	35.01	2000
Columbine	1351000	61/3.78	684.55	102	0.0420	34.02	1889
Narcissus	1272000	61/3.67	645.29	98.7	0.0445	33.03	1780
Hawthorn	1192500	61/3.55	603.78	92.4	0.0476	31.95	1666
Marigold	1113000	61/3.43	563.65	86.2	0.0510	30.87	1555
Bluebell	1033500	37/4.25	524.89	78.8	0.0547	29.75	1448
Larkspur	1033500	61/3.31	524.90	80.3	0.0547	29.79	1448
Hawkweed	1000000	37/4.18	507.74	76.2	0.0566	29.26	1401
Camellia	1000000	61/3.25	506.04	77.4	0.0568	29.25	1396
Magnolia	954000	37/4.08	483.74	72.6	0.0594	28.56	1335
Goldenrod	954000	61/3.18	484.48	74.1	0.0593	28.62	1337
Cockscomb	900000	37/3.96	455.70	68.4	0.0631	27.72	1257
Snapdragon	900000	61/3.09	457.44	70.0	0.0628	27.81	1262
Arbutus	795000	37/3.72	402.14	62.2	0.0715	26.04	1110
Lilac	795000	61/2.90	402.92	63.5	0.0713	26.10	1112
Petunia	750000	37/3.62	380.81	58.9	0.0755	25.34	1051
Cattail	750000	61/2.82	380.99	60.0	0.0754	25.38	1051
Violet	715500	37/3.53	362.11	56.0	0.0794	24.71	999

Code number	Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
-	mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
Nasturtium	715500	61/2.75	362.31	58.7	0.0793	24.75	1000
Verbena	700000	37/3.49	353.95	54.8	0.0812	24.43	977
Flag	700000	61/2.72	354.45	57.4	0.0811	24.48	978
Heuchera	650000	37/3.37	330.03	51.1	0.0871	23.59	911
Orchid	636000	37/3.33	322.24	49.9	0.0892	23.31	889
Meadowsweet	600000	37/3.23	303.18	46.9	0.0948	22.61	837
Mistletoe	556500	37/3.12	282.88	43.8	0.1016	21.84	781
Dahlia	556500	19/4.35	282.37	43.3	0.1018	21.75	779
Zinnia	500000	19/4.12	253.30	38.9	0.1134	20.60	699
Hyacinth	500000	37/2.95	252.89	40.3	0.1136	20.65	698
Cosmos	477000	19/4.02	241.16	37.0	0.1192	20.10	665
Syringa	477000	37/2.88	241.03	38.4	0.1192	20.16	665
GokJentufl	450000	19/3.91	228.14	35.0	0.1260	19.55	630
Canna	397500	19/3.67	200.99	31.8	0.1430	18.35	555
Daffodil	350000	19/3.45	177.62	28.1	0.1618	17.25	490
Tulip	336400	19/3.38	170.48	27.0	0.1686	16.90	470
Peony	300000	19/3.19	151.85	24.0	0.1892	15.95	419
Daisy	266800	7/4.96	135.25	21.4	0.2125	14.88	373
Laurel	266800	19/3.01	135.20	21.4	0.2125	15.05	373
Sneezewort	250000	7/4.80	126.67	20.1	0.2269	14.40	350
Valerian	250000	19/2.91	126.37	20.6	0.2274	14.55	349
Oxlip	4/0	7/4.42	107.41	17.0	0.2675	13.26	296
Phlox	3/0	7/3.93	84.91	13.5	0.3384	11.79	234
Aster	2/0	7/3.50	67.35	11.0	0.4267	10.50	186
Poppy	1/0	7/3.12	53.52	8.73	0.5369	9.36	148
Pansy	1	7/2.78	42.49	7.14	0.6763	8.34	117
Iris	2	7/2.47	33.54	5.96	0.8567	7.41	93
Rose	4	7/1.96	21.12	3.95	1.3606	5.88	58
Peachbell	6	7/1.56	13.38	2.50	2.1477	4.68	37

Technical details ASTM B231

Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
1250	91/4.18	1248.78	183	0.0513	45.98	3479
1120	91/3.96	1120.79	165	0.0232	43.56	3123
1000	91/3.74	999.71	151	0.0259	41.14	2758
900	61/4.33	898.25	133	0.0287	38.97	2478
800	61/4.09	801.43	119	0.0320	36.81	2211
710	6ia85	710.14	105	0.0359	34.65	1959
630	1/3.63	24631.30	96.6	0.0405	32.67	1742
560	61/3.42	560.37	85.7	.0455	29.07	1379

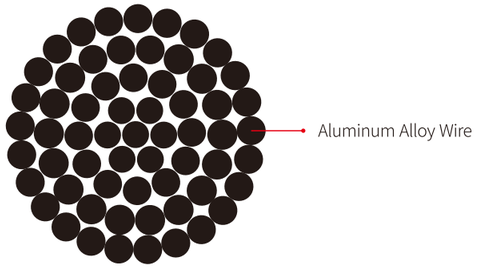
Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
500	37/4.15	500.48	75.1	0.0574	27.58	1245
500	61/3.23	499.83	76.5	0.0575	27.54	1238
450	637/3.94	1451.11	67.7	00.0637	25.97	1104
450	61/3.06	448.60	68.6	0.0641	26.01	1104
400	37/3.71	399.98	61.9	0.0718	24.50	982
400	61/2.89	400.14	63.0	0.0718	24.48	978
355	37/3.50	355.98	55.1	0.0807	23.03	868
355	61/2.72	354.45	57.4	0.0811	21.65	772
315	37/3.29	314.55	48.7	0.0914	21.70	771
280	19/4.33	279.78	42.9	0.1027	20.45	689
280	37/3.10	279.26	43.2	0.1029	20.51	688
250	19/4.09	249.63	38.3	0.1151	19.35	617
250	37/2.93	249.48	39.7	0.1152	18.30	552
224	19/3.87	223.49	34.3	0.1286	17.35	496
200	19/3.66	199.90	31.6	0.1438	16.35	440
180	19/3.47	179.68	28.4	0.1599	15.15	387
160	19/3.27	159.57	25.2	0.1801	15.30	386
140	7/5.05	140.21	22.2	0.2049	14.31	345
140	19/3.06	139.73	22.1	0.2057	30.78	1546
125	7/4.77	125.09	19.8	0.2297	29.05	1381

Technical details EN 50182

New code	Old code	Area	No.	Diameter		Approx weight	Rated strength	DC resistance at 20 °C
				Wire	Conductor			
-	-	mm^2	-	mm	mm	kg/km	kN	Ω/km
24-AL1	25	24.2	7	2.10	6.30	66.3	4.36	1.1787
34-AL1	35	34.4	7	2.50	7.50	93.9	6.01	0.8317
4&-AL1	50	49.5	7	3.00	9.00	135.2	8.41	0.5776
6&-AL1	70	65.8	19	2.10	10.50	180.9	11.85	0.4367
9S-AL1	95	93.3	19	2.50	12.50	256.3	16.32	0.3081
117^L1	120	117.0	19	2.80	14.00	321.5	19.89	0.2456
147-AL1	150	147.1	37	2.25	15.75	405.7	26.48	0.1960
182-AL1	185	181.6	37	2.50	17.50	500.9	31.78	0.1588
24^AL1	240	242.5	61	2.25	20.25	671.1	43.66	0.1193
29&-AL1	300	299.4	61	2.50	22.50	828.5	52.40	0.0966
40(ML1	400	400.1	61	2.89	26.01	1107.1	68.02	0.0723
452-AL1	450	451.5	61	3.07	27.63	1249.3	74.50	0.0641
50CML1	500	499.8	61	3.23	29.07	1382.9	82.47	0.0579
62&-AL1	625	626.2	91	2.96	32.56	1739.7	106.45	0.0464
80241	800	802.1	91	3.35	36.85	2228.3	132.34	0.0362
1000^L1	1000	999.7	91	3.74	41.14	2777.3	159.95	0.0291

All aluminum alloy conductors 6201 (AAAC/6201)

Standards: IEC, ASTM, EN





Application

It is used for overhead power transmission and distribution line.

Construction

Stranded with aluminum alloy 6201 wires

Features

The conductors have higher strength than aluminum conductors and excellent ratio of tension and weight. Conductors have no hysteresis losses, The power loss of transmission line is reduced effectively The structure of single metal avoids the slectrochemical reaction that will happen in the thermometal, so conductors will have a longer service life.

Description

Technical details I EC 61089

Code number	Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
-	mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
16	18.4	7/1.83	18.41	5.43	1.7896	5.49	50.3
25	28.8	7/2.29	28.83	8.50	1.1454	6.87	78.8
40	46.0	7/2.89	45.92	13.57	0.7159	8.67	125.8
63	72.5	7/3.63	72.44	21.39	0.4545	10.89	198.3
100	115	19/2.78	115.33	33.93	0.2877	13.90	316.1
125	144	19/3.10	143.41	42.48	0.2302	15.50	395.8
160	184	19/3.51	183.85	54.28	0.1798	17.55	505.7
200	230	19/3.93	230.48	67.85	0.1439	19.65	632.2
250	288	19/4.39	287.59	84.96	0.1151	21.95	791.6
315	363	37/3.53	362.11	107.09	0.0916	24.71	1000.1
400	460	37/3.98	460.32	135.70	0.0721	27.86	1267.3
450	518	37/4.22	517.51	152.81	0.0641	29.54	1427.1
500	575	37/4.45	575.46	169.63	0.0577	31.15	1584.2

Code number	Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
-	mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
560	645	61/3.67	645.29	190.28	0.0516	33.03	1779.6
630	725	61/3.89	724.97	213.88	0.0458	35.01	2000.4
710	817	61/4.13	817.19	241.02	0.0407	37.17	2254.2
800	921	61/4.38	919.11	271.70	0.0361	39.42	2541.2
900	1036	91/3.81	1037.49	305.62	0.0321	41.91	2861.5
1000	1151	91/4.01	1149.27	339.55	0.0289	44.11	3179.2
1120	1289	91/4.25	1290.95	380.26	0.0258	46.75	3560.3
1250	1439	91/4.49	1440.87	424.51	0.0231	49.39	3974.7

Technical details Type A IEC 61089

Code number	Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
-	mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
16	18.6	7/1.84	18.61	6.05	1.7896	5.52	50.9
25	29.0	7^2.30	29.08	9.43	1.1454	6.90	79.3
40	46.5	7/2.91	46.56	15.11	0.7159	8.73	127.2
63	73.2	7/3.65	73.24	23.06	0.4545	10.95	200.2
100	116	19/2.79	116.16	37.70	0.2877	13.95	318.8
125	145	19/3.12	145.26	47.13	0.2302	15.60	398.5
160	186	19/3.53	185.95	58.59	0.1798	17.65	511.2
200	232	19/3.95	232.83	73.08	0.1439	19.75	637.7
250	290	19/4.41	290.22	91.35	0.1151	22.05	797.1
315	366	37/3.55	366.23	115.29	0.0916	24.85	1008.4
400	465	37/4.00	464.96	146.48	0.0721	28.00	1281.1
450	523	37/4.24	522.43	164.75	0.0641	29.68	1440.9
500	581	37/4.47	580.64	183.02	0.0577	31.29	1600.7
560	651	61/3.69	652.34	205.07	0.0516	33.21	1796.2
630	732	61/3.91	732.44	230.58	0.0458	35.19	2019.7
710	825	61/4.15	825.12	259.88	0.0407	37.35	2276.3
800	930	61/4.40	927.53	292.95	0.0361	39.60	2566.0
900	1046	91/3.83	1048.41	329.49	0.0321	42.13	2889.2
1000	1162	91/4.03	1160.76	366.03	0.0289	44.33	3209.6
1120	1301	91/4.27	1303.13	409.82	0.0258	46.97	3593.5

Technical details ASTM B399

Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
1439200	61/3.90	728.70	207	0.0460	35.10	1999
1348800	61/3.78	684.55	194	0.0489	34.02	1878
1259600	61/3.65	638.27	181	0.0525	32.85	1751

Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
1165100	61/3.51	590.25	167	0.0568	31.59	1620
1077400	61/3.38	547.34	155	0.0612	30.42	1502
927200	37/4.02	469.62	135	0.0713	28.14	1289
740800	37/3.59	374.53	107	0.0894	25.13	1028
652400	19/4.71	331.04	97.0	0.1012	23.55	908
559500	19/4.36	283.67	83.1	0.1181	21.80	778
465400	19/3.98	236.38	69.2	0.1417	19.90	649
394500	19/3.66	199.90	58.6	0.1676	18.30	549
312800	19/3.26	158.59	46.5	0.2112	16.30	435
246900	7/4.77	125.09	37.8	0.2678	14.31	343
195700	7/4.25	99.30	30.0	0.3373	12.75	273
155400	7/3.78	78.55	23.8	0.4264	11.34	216
123300	7/3.37	62.44	18.9	0.5365	10.11	171
77470	7/2.67	39.19	12.4	0.8547	8.01	108
48690	7/2.12	24.71	7.83	1.3557	6.36	68
30580	7/1.68	15.52	4.92	2.1588	5.04	43
1750000	61/4.30	885.84	251	0.0378	38.70	2431
1500000	61/3.98	758.90	215	0.0441	35.82	2082
1250000	61/3.63	631.30	179	0.0531	32.67	1732
1000000	37/4.18	507.74	146	0.0660	29.26	1393
900000	37/3.96	455.70	131	0.0735	27.72	1250
800000	37/3.73	404.31	116	0.0829	26.11	1109
750000	37/3.62	380.81	109	0.0880	25.34	1045
700000	37/3.49	353.95	101	0.0946	24.43	971
660000	37/3.37	330.03	94.6	0.1015	23.59	906
600000	37/3.23	303.18	91.0	0.1105	22.61	832
550000	37/3.10	279.26	83.9	0.1200	21.70	766
500000	19/4.12	253.30	74.2	0.1322	20.60	695
450000	19/3.91	228.14	66.8	0.1468	19.55	626
400000	19/3.69	203.19	59.5	0.1649	18.45	558
350000	19/3.45	177.62	52.0	0.1886	17.25	487
300000	19/3.19	151.85	46.6	0.2206	15.95	417
250000	19/2.91	126.37	38.8	0.2651	14.55	347
4/0	7/4.42	107.41	32.5	0.3119	13.26	295
3/0	7/3.93	84.91	25.7	0.3945	11.79	233
2/0	7/3.50	67.35	20.4	0.4974	10.50	185
1/0	7/3.12	53.52	17.0	0.6259	9.36	147
2	7/2.47	33.54	10.6	0.9987	7.41	92
4	7/1.96	21.12	6.69	1.5860	5.88	58
6	7/1.55	13.21	4.18	2.5361	4.65	36
630	37/4.66	631.05	181	0.0531	32.62	1732
560	37/4.39	560.04	161	0.0598	30.73	1537
500	37/4.15	500.48	143	0.0669	29.05	1373
450	37/3.94	451.11	129	0.0743	23.03	863

Size of conductor	Struchure	Calculated area	Rated strength	DC resistance at 20 °C	Overall diameter	Approx weight
mm^2	No/mm	mm^2	kN	Ω/km	mm	kg/km
400	37/3.71	399.98	115	0.0837	21.70	766
355	37/3.50	355.98	102	0.0941	20.45	685
315	37/3.29	314.55	90.2	0.1065	19.35	613
280	37ai0	279.26	83.9	0.1200	18.30	549
250	19/4.09	249.63	73.1	0.1342	17.35	493
224	19/3.87	223.49	65.5	0.1499	16.35	438
200	19/3.66	199.90	58.6	0.1676	15.30	383
180	19/3.47	179.68	52.6	0.1864	14.45	342
160	19/3.27	159.57	46.7	0.2099	13.53	307
140	19/3.06	139.73	42.9	0.2397	12.78	274
125	19/2.89	124.64	38.3	0.2688	11.43	219
112	7/4.51	111.83	33.8	0.2996	10.17	173
100	7/4.26	99.77	30.2	0.3357	9.06	138
80.0	7/3.81	79.81	24.1	0.4197	8.10	110
63.0	7/3.39	63.18	19.1	0.5302	7.17	86
50.0	7/3.02	50.14	15.9	0.6681	6.39	68
40.0	7/2.70	40.08	12.7	0.8358	5.73	55
31.5	7/2.39	31.40	10.0	1.0667	5.13	44
25.0	7/2.13	24.94	7.90	1.3430	27.58	1238
20.0	7/1.91	20.06	6.35	1.6702	25.97	1098
16.0	7/1.71	16.08	5.09	2.0837	24.50	977

Technical details EN 50182

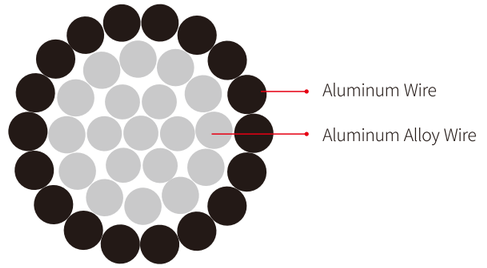
New code	Old code	Area	No.	Diameter		Approx weight	Rated strength	DC resistance at 20 °C
				Wire	Conductor			
-	-	mm^2	-	mm	mm	kg/km	kN	Ω/km
24-AL3	25	24.2	7	2.10	6.30	66.2	7.15	1.3566
34-AL3	35	34.4	7	2.50	7.50	93.8	10.14	0.9572
49-AL3	50	49.5	7	3.00	9.00	135.1	14.60	0.6647
66-AL3	70	65.8	19	2.10	10.50	180.7	19.41	0.5026
93-AL3	95	93.3	19	2.50	12.50	256.0	27.51	0.3546
117-AL3	120	117.0	19	2.80	14.00	321.2	34.51	0.2827
147-L3	150	147.1	37	2.25	15.75	405.3	43.40	0.2256
182-AL3	185	181.6	37	2.50	17.50	500.3	53.58	0.1827
243-AL3	240	242.5	61	2.25	20.25	670.3	70.55	0.1373
299-AL3	300	299.4	61	2.50	22.50	827.6	88.33	0.1112
400-AL3	400	400.1	61	2.89	26.01	1105.9	118.04	0.0832
452-AL3	450	451.5	61	3.07	27.63	1247.9	133.20	0.0737
500-AL3	500	499.8	61	3.23	29.07	1381.4	147.45	0.0666
626-AL3	626.2	626.2	91	2.96	32.56	1737.8	184.73	0.0534
802-AL3	802.1	802.1	91	3.35	36.85	2225.8	236.62	0.0417
1000-AL3	1000	999.7	91	3.74	41.14	2774.3	294.92	0.0334

Technical details EN 50182

New code	Old code	Area	No.	Diameter		Approx weight	Rated strength	DC resistance at 20 °C
				Wire	Conductor			
-	-	mm^2	-	mm	mm	kg/km	kN	Ω/km
19-AL3	BOX	18.8	7	1.85	5.55	51.4	5.55	1.7480
24-AL3	ACACIA	23.8	7	2.08	6.24	64.9	7.02	1.3828
30-AL3	ALMOND	30.1	7	2.34	7.02	82.2	8.88	1.0926
35-AL3	CEDAR	35.5	7	2.54	7.62	96.8	10.46	0.9273
42-AL3	DEODAR	42.2	7	2.77	8.31	115.2	12.44	0.7797
48-AL3	FIR	47.8	7	2.95	8.85	130.6	14.11	0.6875
60-AL3	HAZE	59.9	7	3.30	9.90	163.4	17.66	0.5494
72-AL3	PINE	71.6	7	3.61	10.83	195.6	21.14	0.4591
84-AL3	HOLLY	84.1	7	3.91	11.73	229.5	24.80	0.3913
90-AL3	WILLOW	89.7	7	4.04	12.12	245.0	26.47	0.3665
119-AL3	OAK	118.9	7	4.65	13.95	324.5	35.07	0.2767
151-AL3	MULBERRY	150.9	19	3.18	15.90	414.3	44.52	0.2192
181-AL3	ASH	180.7	19	3.48	17.40	496.1	53.31	0.1830
211-AL3	ELM	211.0	19	3.76	18.80	579.2	62.24	0.1568
239-AL3	POPLAR	239.4	37	2.87	20.09	659.4	70.61	0.1387
303-AL3	SYCAMORE	303.2	37	323	22.61	835.2	89.44	0.1095
362-AL3	UPAS	362.1	37	3.53	24.71	997.5	106.82	0.0917
479-AL3	YEW	479.0	37	4.06	28.42	1319.6	141.31	0.0693
498-AL3	TOTARA	498.1	37	4.14	28.98	1372.1	146.93	0.0666
587-AL3	RUBUS	586.9	61	3.50	31.50	1622.0	173.13	0.0567
659-AL3	SORBUS	659.4	61	3.71	33.39	1822.5	194.53	0.0505
821-AL3	ARAUCARIA	821.1	61	4.14	37.26	2269.4	242.24	0.0406
996-AL3	REDWOOD	996.2	61	4.56	41.04	2753.2	293.88	0.0334

Aluminum Conductor, Aluminum Alloy Reinforced (ACAR)

Standards: IEC, ASTM





Application

It is used for overhead power transmission and distribution line.

Construction

Concentrically stranded with aluminum-alloy 6201 wires as the core and aluminum wires as the outer layers. In some constructions, aluminum alloy wires and aluminum can be in the same layer.

Features

This kind of conductors has no hysteresis loss ,no electrochemical corrosion, and has lower power trans resistance; It has the features of light weight, high strength, excellent ratio of tension and weight.

Description

Recommended standard stranding

Total no. of wires	No.of aluminum wires/No.of alloy			
7	4/3	-	-	-
19	15/4	12/7	-	-
37	33/4	30/7	24/13	18/19
61	54/7	48/13	42/19	33/28
91	-	72/19	63/28	54/37

Technical details Type B IEC 61089

Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Al	Alloy	Al	Alloy	Total				
	mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
16	10/7	4/1.76	3/1.76	9.73	7.30	17.03	3.85	1.7896	5.28	46.6
25	15/10	4/2.20	3/220	15.21	11.40	26.61	5.93	1.1454	6.60	72.8
40	24/20	4/2.78	3/2.78	24.28	18.21	42.49	9.23	0.7159	8.34	116.2
63	40/30	4/3.49	3/3.49	38.27	28.70	66.96	14.36	0.4545	10.47	183.2
100	60/45	4/4.40	3/4.40	60.82	45.62	106.44	22.52	0.2863	13.20	291.2
125	80/50	12/2.97	7/2.97	83.14	48.50	131.63	27.72	0.2302	14.85	361.8
160	105/60	12/3.36	7/3.36	106.40	62.07	168.47	34.95	0.1798	16.80	463.1
200	135/80	12/3.76	7/3.76	133.24	77.73	210.97	43.10	0.1439	18.80	579.8
250	170/95	12/4.21	7/4.21	167.05	97.44	264.49	54.04	0.1151	21.05	726.9
250	130/140	18/3.04	19/3.04	130.65	137.91	268.56	60.21	0.1154	21.28	739.9
315	265/60	30/3.34	7/3.34	262.85	61.33	324.18	60.56	0.0916	23.38	893.2
315	165/175	18/3.42	19/3.42	165.35	174.54	339.90	76.20	0.0916	23.94	936.5
400	335/80	30/3.76	7/3.76	333.11	77.73	410.84	75.08	0.0721	26.32	1131.8
400	210/220	18/3.85	19/3.85	209.55	221.19	430.74	95.52	0.0721	26.95	1186.7
450	375/85	30/3.99	7/3.99	375.11	87.53	462.63	84.55	0.0641	27.93	1274.6
450	235/250	18/4.08	19/4.08	235.33	248.41	483.74	107.27	0.0641	28.56	1332.8
500	415/95	30/4.21	7/4.21	417.62	97.44	515.06	94.13	0.0577	29.47	1419.1
500	260/275	18/4.31	19/4.31	262.61	277.20	539.82	119.70	0.0577	30.17	1487.2
560	465/110	30/4.45	7/4.45	466.59	108.87	575.46	105.16	0.0515	31.15	1585.4
560	505/65	54/3.45	7/3.45	504.80	65.44	570.24	101.63	0.0516	31.05	1573.4
630	455/205	42/3.71	19/3.71	454.03	205.40	659.43	130.21	0.0458	33.39	1819.4
630	270/420	24/3.79	37/3.79	270.76	417.42	688.18	160.30	0.0458	34.11	1898.8
710	514/230	42/3.94	19/3.94	512.07	231.65	743.73	146.85	0.0407	35.46	2052.1
710	307/470	24/4.02	37/4.02	304.62	469.62	774.24	180.35	0.0407	36.18	2136.2
800	580/260	42/4.18	19/4.18	576.36	260.73	837.09	165.29	0.0361	37.62	2309.6
800	345/530	24/4.27	37/4.27	343.68	529.84	873.53	203.48	0.0361	38.43	2410.2
900	650/295	42/4.43	19/4.43	647.36	292.85	940.22	185.65	0.0321	39.87	2594.2
900	570/390	54/3.66	37/3.66	568.13	389.27	957.40	199.99	0.0321	40.26	2644.4
1000	820/215	72/3.80	19/3.80	816.56	215.48	1032.05	191.04	0.0289	41.80	2850.6
1000	630/430	54/3.85	37/3.85	628.65	430.74	1059.38	221.30	0.0289	42.35	2926.1
1120	915/240	72/4.02	19/4.02	913.85	241.16	1155.01	213.80	0.0258	44.22	3190.2
1120	705/485	54/4.08	37/4.08	706.00	483.74	1189.74	248.53	0.0258	44.88	3286.1
1250	1020/270	72/4.25	19/4.25	1021.41	269.54	1290.95	238.96	0.0231	46.75	3565.7
1250	790/540	54/4.31	37/4.31	787.84	539.82	1327.66	277.34	0.0231	47.41	3667.1
1400	1145/300	72/4.50	19/4.50	1145.11	302.18	1447.30	267.90	0.0207	49.50	3997.6

Technical details Type A IEC 61089

Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Al	Alloy	Al	Alloy	Total				
	mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
16	10/7	4/1.76	3/1.76	9.73	7.30	17.03	4.05	1.7896	5.28	46.6
25	15/10	4/2.21	3/2.21	15.34	11.51	26.85	6.31	1.1454	6.63	73.5
40	24/20	4/2.79	3/2.79	24.45	18.34	42.80	9.82	0.7159	8.37	117.1
63	40/30	4/3.50	3/3.50	38.48	28.86	67.35	15.26	0.4545	10.50	184.3
100	60/45	4/4.41	3/4.41	61.10	45.82	106.92	23.49	0.2863	13.23	292.4
125	80/50	12/2.98	7/2.98	83.70	48.82	132.52	29.30	0.2302	14.90	364.2
160	105/60	12/3.37	7/3.37	107.04	62.44	169.47	36.94	0.1798	16.85	465.8
200	135/80	12/3.77	7/3.77	133.95	78.14	212.09	44.82	0.1439	18.85	583.0
250	170/95	12/4.21	7/4.21	167.05	97.44	264.49	55.89	0.1151	21.05	726.9
250	130/140	18/3.05	19/3.05	131.51	138.82	270.33	64.56	0.1154	21.35	744.8
315	265/60	30/3.34	7/3.34	262.85	61.33	324.18	62.31	0.0916	23.38	893.2
315	165/175	18/3.43	19/3.43	166.32	175.56	341.89	81.65	0.0916	24.01	941.9
400	335/80	30/3.77	7/3.77	334.88	78.14	413.02	76.96	0.0721	26.39	1137.9
400	210/220	18/3.86	19/3.86	210.64	222.34	432.98	100.24	0.0721	27.02	1192.9
450	375/85	30/3.99	7/3.99	375.11	87.53	462.63	86.21	0.0641	27.93	1274.6
450	235/250	18/4.10	19/4.10	237.65	250.85	488.50	113.09	0.0641	28.70	1345.8
500	415/95	30/4.21	7/4.21	417.62	97.44	515.06	95.98	0.0577	29.47	1419.1
500	260/275	18/4.32	19/4.32	263.83	278.49	542.33	125.55	0.0577	30.24	1494.2
560	465/110	30/4.46	7/4.46	468.69	109.36	578.05	107.72	0.0515	31.22	1592.6
560	505/65	54^3.45	7/3.45	504.80	65.44	570.24	103.50	0.0516	31.05	1573.4
630	455/205	42/3.72	19/3.72	456.48	206.50	662.99	134.83	0.0458	33.48	1829.3
630	270/420	24/3.80	37/3.80	272.19	419.62	691.81	169.12	0.0458	34.20	1908.8
710	514/230	42/3.95	19/3.95	514.68	232.83	747.51	152.02	0.0407	35.55	2062.5
710	307/470	24/4.03	37/4.03	306.13	471.96	778.09	190.21	0.0407	36.27	2146.9
800	580/260	42/4.19	19/4.19	579.12	261.98	841.10	171.06	0.0361	37.71	2320.7
800	345/530	24/4.28	37/4.28	345.29	532.33	877.62	214.55	0.0361	38.52	2421.5
900	650/295	42/4.44	19/4.44	650.29	294.18	944.47	192.08	0.0321	39.96	2605.9
900	570/390	54/3.66	37/3.66	568.13	389.27	957.40	207.39	0.0321	40.26	2644.4
1000	820/215	72/3.80	19/3.80	816.56	215.48	1032.05	195.13	0.0289	41.80	2850.6
1000	630/430	54/3.86	37/3.86	631.92	432.98	1064.90	230.68	0.0289	42.46	2941.3
1120	915/240	72/4.02	19/4.02	913.85	241.16	1155.01	218.38	0.0258	44.22	3190.2
1120	705/485	54/4.09	37/4.09	709.47	486.12	1195.58	258.98	0.0258	44.99	3302.3
1250	1020/270	72/4.25	19/4.25	1021.41	269.54	1290.95	244.09	0.0231	46.75	3565.7
1250	790/540	54/4.32	37/4.32	791.50	542.33	1333.83	288.93	0.0231	47.52	3684.2
1400	1145/300	72/4.50	19/4.50	1145.11	302.18	1447.30	273.65	0.0207	49.50	3997.6

Technical details ASTM B524

Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
	Al	Alloy	Al	Alloy	Total				
Komil	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
3000	54/4.61	37/4.61	901.34	617.58	1518.92	306	0.0203	50.71	4222
2750	54/4.41	37/4.41	824.83	565.16	1389.99	280	0.0222	48.51	3864
2500	54/4.21	37/4.21	751.71	515.06	1266.77	256	0.0243	46.31	3522
2493	54/4.20	37/4.20	748.14	512.61	1260.75	254	0.0244	46.20	3505
2338	54/4.97	37/4.97	1047.60	717.80	1765.40	356	0.0174	44.73	4908
2250	54/3.99	37/3.99	675.20	462.63	1137.83	230	0.0271	43.89	3163
2000	54/3.76	37/3.76	599.60	410.84	1010.44	204	0.0302	41.36	2782
2000	42/4.60	19/4.60	698.00	315.76	1013.76	195	0.0297	41.40	2792
1933	42/4.52	19/4.52	673.93	304.87	978.80	188	0.0307	40.68	2696
1900	42/4.48	19/4.48	662.06	299.50	961.56	185	0.0313	40.32	2649
1800	42/4.36	19/4.36	627.07	283.67	910.74	175	0.0330	39.24	2508
1798	42/4.36	19/4.36	627.07	283.67	910.74	175	0.0330	39.24	2508
1750	42/4.30	19/4.30	609.93	275.92	885.85	170	0.0339	38.70	2440
1703	42/4.24	19/4.24	593.02	268.27	861.29	166	0.0349	38.16	2372
1700	42/4.24	19/4.24	593.02	268.27	861.29	166	0.0349	38.16	2372
1600	42/4.11	19/4.11	557.22	252.07	809.29	156	0.0372	36.99	2229
1534.4	42/4.03	19/4.03	535.74	242.36	778.10	150	0.0386	36.27	2143
1500	42/3.98	19/3.98	522.52	236.38	758.90	146	0.0396	35.82	2090
1400	42/3.85	19/3.85	4fi8.95	221.19	710.14	137	0.0423	34.65	1956
1361.5	42/3.79	19/3.79	473.83	214.35	688.18	132	0.0437	34.11	1895
1300	42/3.71	19/3.71	454.03	205.40	659.43	129	0.0456	33.39	1816
1300	18/4.76	19/4.76	320.32	338.11	658.43	145	0.0471	33.32	1812
1277	42/3.68	19/3.68	446.72	202.09	648.81	127	0.0463	33.12	1787
1250	42/3.63	19/3.63	434.66	196.63	631.29	123	0.0476	32.67	1739
1250	30/4.67	7/4.67	513.86	119.90	633.76	113	0.0466	32.69	1747
1200	42/3.56	19/3.56	418.06	189.12	607.18	119	0.0495	32.04	1672
1200	18/4.57	19/4.57	295.25	311.66	606.91	134	0.0511	31.99	1670
1198	18/4.57	19/4.57	295.25	311.66	606.91	134	0.0511	31.99	1670
1172	18/4.52	19/4.52	288.83	304.87	593.70	131	0.0522	31.64	1633
1109	18/4.40	19/4.40	273.70	288.90	562.60	124	0.0551	30.80	1548
1100	42/3.41	19/3.41	383.57	173.52	557.09	109	0.0540	30.69	1534
1100	18/4.38	19/4.38	271.21	286.28	557.49	123	0.0556	30.66	1534
1080.6	18/4.34	19/4.34	266.28	281.08	547.36	120	0.0566	30.38	1506
1024.5	18/4.23	19/4.23	252.96	267.01	519.97	114	0.0596	29.61	1431
1000	42/3.25	19/3.25	348.42	157.62	506.04	101	0.0594	29.25	1394
1000	18/4.18	1Q/4.18	247.01	260.73	507.74	112	0.0611	29.26	1397
950	18/4.07	19/4.07	234.18	247.19	481.37	106	0.0644	28.49	1324

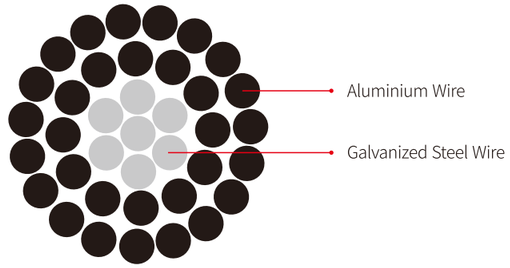
Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
	Al	Alloy	Al	Alloy	Total				
Komil	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
3000927.2	18/4.02	19/4.02	228.46	241.16	469.62	103	0.0660	28.14	1292
900	18/3.96	19/3.96	221.69	234.01	455.70	100	0.0680	27.72	1254
853.7	18/3.86	19/3.86	210.64	222.34	432.98	95	0.0716	27.02	1191
850	18/3.85	19/3.85	209.55	221.19	430.74	95	0.0720	26.95	1185
800	18/373	19/3.73	196.69	207.62	404.31	90	0.0767	26.11	1112
750	18/3.62	19/3.62	185.26	195.55	380.81	85	0.0814	25.34	1048
739.8	18/3.59	19/3.59	182.20	192.32	374.52	83	0.0828	25.13	1030
700	18/3.49	19/3.49	172.19	181.76	353.95	79	0.0876	24.43	974
653.1	12/4.71	7/4.71	209.08	121.96	331.04	68	0.0916	23.55	912
650	18/3.37	19/3.37	160.56	169.47	330.02	73	0.0939	23.59	908
649.5	18/3.37	19/3.37	160.55	169.47	330.02	73	0.0939	23.59	908
600	18/3.23	19/3.23	147.49	155.69	303.18	69	0.1022	22.61	834
600	12/4.51	7/4.51	191.70	111.83	303.53	62	0.0999	22.55	836
587.2	12/4.47	7/4.47	188.32	109.85	298.17	61	0.1017	22.35	821
550	18/3.10	19/3.10	135.86	143.41	279.27	64	0.1110	21.70	768
550	12/4.32	7/4.32	175.89	102.60	278.49	57	0.1089	21.60	767
503.6	12/4.14	7/4.14	161.54	94.23	255.77	53	0.1186	20.70	704
500	18/2.95	19/2.95	123.03	129.86	252.89	59	0.1226	20.65	696
500	12/4.12	7/4.12	159.98	93.32	253.30	52	0.1197	20.60	698
450	12/3.91	7/3.91	144.09	84.05	228.14	47	0.1329	19.55	628
400	12/3.69	7/3.69	128.33	74.86	203.19	42	0.1492	18.45	560
350	12/3.45	7/3.45	112.18	65.44	177.62	37	0.1707	17.25	489
300	12/3.19	7/3.19	95.91	55.95	151.86	32	0.1997	15.95	418
250	12/2.91	7/2.91	79.81	46.56	126.37	27	0.2400	14.55	348
246.9	4/4.77	3/4.77	71.48	53.61	125.09	27	0.2446	14.31	344
211.6	4/4.42	3/4.42	61.38	46.03	107.41	23	0.2849	13.26	296
195.7	4/4.25	3/4.25	56.75	42.56	99.31	21	0.3081	12.75	273
167.8	4/3.93	3/3.93	48.52	36.39	84.91	18	0.3604	11.79	234
155.4	4/3.78	3/3.78	44.89	33.67	78.56	17	0.3895	11.34	216
133.1	4/3.50	3/3.50	38.48	28.86	67.34	15	0.4544	10.50	185
123.3	4/3.37	3/3.37	35.68	26.76	62.44	14	0.4901	10.11	172
105.6	4/3.12	3/3.12	30.58	22.94	53.52	12	0.5718	9.36	147
77.47	4/2.67	3/2.67	22.40	16.80	39.20	9	0.7806	8.01	108
66.36	4/2.47	3/2.47	19.17	14.37	33.54	8	0.9123	7.41	92
48.69	4/2.12	3/2.12	14.12	10.59	24.71	6	1.2384	6.36	68
41.74	4/1.96	3/1.96	12.07	9.05	21.12	5	1.44fi8	5.88	58
30.58	4/1.68	3/1.68	8.87	6.65	15.52	4	1.9716	5.04	43

Technical details ASTM B524

Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
	Al	Alloy	Al	Alloy	Total				
mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
1600	54/4.73	37/4.73	948.87	650.15	1599.02	323	0.0194	52.03	4488
1400	54/4.43	37/4.43	832.32	570.30	1402.62	283	0.0220	48.73	3899
1250	54/4.18	37/4.18	741.03	507.74	1248.77	252	0.0247	45.96	3471
1120	54/3.96	37/3.96	665.08	455.70	1120.78	226	0.0275	43.56	3116
1000	54/3.74	37/3.74	593.24	406.48	999.72	204	0.0305	41.14	2752
1000	42/4.57	19/4.57	688.93	311.66	1000.59	192	0.0300	41.13	2756
900	42/4.33	19/4.33	618.47	279.78	898.25	173	0.0335	38.97	2474
800	42/4.09	19/4.09	551.81	249.63	801.44	154	0.0375	36.81	2207
710	42/3.85	19/3.85	4fi8.95	221.19	710.14	137	0.0423	34.65	1956
630	42/3.63	19/3.63	434.66	196.63	631.29	123	0.0476	32.67	1739
630	18/4.66	19/4.66	307.00	324.05	631.05	139	0.0491	32.62	1736
560	42/3.42	19/3.42	385.83	174.54	560.37	110	0.0537	30.78	1543
560	18/4.39	19/4.39	272.45	287.59	560.04	123	0.0554	30.73	1541
500	42/3.23	19/3.23	344.15	155.69	499.84	100	0.0602	29.07	1377
500	18/4.15	19/4.15	243.48	257.00	500.48	110	0.0619	29.05	1377
450	18/3.94	19/3.94	219.46	231.65	451.11	99	0.0687	27.58	1241
400	18/3.71	19/3.71	194.59	205.40	399.99	89	0.0775	25.97	1101
355	18/3.50	19/3.50	173.18	182.80	355.98	79	0.0871	24.50	979
315	18/3.29	19/3.29	153.02	161.52	314.54	70	0.0986	23.03	865
280	18/3.10	19/3.10	135.86	143.41	279.27	64	0.1110	21.70	768
280	12/4.33	7/4.33	176.70	103.08	279.78	58	0.1084	21.65	770
250	18/2.93	19/2.93	121.37	128.11	249.48	58	0.1243	20.51	686
250	12/4.09	7/4.09	157.66	91.97	249.63	51	0.1215	20.45	687
224	12/3.87	7/3.87	141.15	82.34	223.49	46	0.1357	19.35	615
200	12/3.66	7/3.66	126.25	73.65	199.90	42	0.1517	18.30	550
180	12/3.47	7/3.47	113.48	66.20	179.68	38	0.1688	17.35	495
160	12/3.27	7/3.27	100.78	58.79	159.57	33	0.1900	16.35	439
140	12/3.06	7/3.06	88.25	51.48	139.73	30	0.2170	15.30	385
125	4/4.77	3/4.77	71.48	53.61	125.09	27	0.2446	14.31	344
112	4/4.51	3/4.51	63.90	47.93	111.83	24	0.2736	13.53	308
100	4/4.26	3/4.26	57.01	42.76	99.77	21	0.3067	12.78	275
80	4/3.81	3/3.81	45.60	34.20	79.80	17	0.3835	11.43	220
63	4/3.39	3/3.39	36.10	27.08	63.18	14	0.4643	10.17	174
50	4/3.02	3/3.02	28.65	21.49	50.14	11	0.6103	9.06	138
40	4^2.70	3/2.70	22.90	17.18	40.08	9	0.7635	8.10	110
31.5	4^2.39	3/2.39	17.95	13.46	31.41	7	0.9742	7.17	86
25	4^2.13	3/2.13	14.25	10.69	24.94	6	1.2270	6.39	69
20	4/1.91	3/1.91	11.46	8.60	20.06	5	1.5255	5.73	55
16	4/1.71	3/1.71	9.19	6.89	16.08	4	1.9030	5.13	44

Aluminum conductor, steel reinforced (ACSR)

Standards: IEC, ASTM, EN





Application

It is used for overhead power transmission and distribution line.

Construction

Stranded with the steel wires and aluminum wires

Features

This kind of conductors has better conduct performance, excellent: ensile strength, good mechanic property and is widely used.

Description

Technical details EN 50182

Code number	Size of conductor	Structure		Calculated area			Rated strength			DC resistance at 20 °C	Overall diameter	Approx weight
		Al	St	Al	St	Total	S1A	S2A	S3A			
-	mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	kN	kN	Ω/km	mm	kg/km
16	16/3	6/1.84	1/1.84	15.95	2.66	18.61	6.07	6.44	6.82	1.7934	5.52	64.6
25	25/4	6/2.30	1/2.30	24.93	4.15	29.08	9.11	9.69	10.23	1.1477	6.90	100.9
40	40/6	6/2.91	1/2.91	39.91	6.65	46.56	14.38	15.31	16.18	0.7173	8.73	161.7
63	65/10	6/3.66	1/3.66	63.13	10.52	73.65	21.65	22.39	24.18	0.4555	10.98	255.7
100	100/17	6/4.61	1/4.61	100.15	16.69	116.84	34.36	35.53	38.37	0.2869	13.83	405.7
125	125^7	18/2.97	1/2.97	124.70	6.93	131.63	29.15	30.12	31.02	0.2304	14.85	397.5
125	125/20	26/2.47	7/1.92	124.58	20.27	144.85	45.59	48.42	51.26	0.2310	15.64	502.0
160	160/9	18/3.36	1/3.36	159.60	8.87	168.47	36.15	37.39	38.64	0.1800	16.80	508.8
160	160/26	26/Z80	7/2.18	160.10	26.13	186.22	57.77	61.43	65.09	0.1805	17.74	645.7
200	200/11	18/3.76	1/3.76	199.87	11.10	210.97	44.21	44.99	46.88	0.1440	18.80	637.2
200	200/32	26/3.13	7/2.43	200.06	32.46	232.52	70.01	74.55	78.77	0.1444	19.81	805.5
250	250/25	22/3.80	7/2.11	249.51	24.48	273.98	68.64	72.06	75.49	0.1154	21.53	878.6
250	250/40	26/3.50	7/2.72	250.15	40.67	290.82	87.62	93.31	98.60	0.1155	22.16	1007.8
315	315/22	45/2.99	7/1.99	315.97	21.77	337.74	79.02	82.07	85.12	0.0917	23.91	1042.2

Code number	Size of conductor	Structure		Calculated area			Rated strength			DC resistance at 20 °C	Overall diameter	Approx weight
		Al	St	Al	St	Total	S1A	S2A	S3A			
-	mm²	No/mm	No/mm	mm²	mm²	mm²	kN	kN	kN	Ω/km	mm	kg/km
315	315/50	26/3.93	7/3.05	315.39	51.14	366.53	106.66	113.82	120.98	1.0.0917	524.87	1269.5
400	400/28	45/3.36	7/2.24	399.01	27.59	426.59	98.28	102.14	106.00	0.0722	26.88	1316.8
400	400/50	54/3.07	7/3.07	399.73	51.82	451.54	123.00	130.25	137.51	0.0723	27.63	1509.3
450	450/30	45/3.57	7/2.38	450.44	31.14	481.58	107.50	111.86	115.91	0.0642	28.56	1486.6
450	450/60	54/3.26	7/3.26	450.73	58.43	509.16	138.52	146.70	154.88	0.0643	29.34	1701.8
500	500/35	45/3.76	7/2.51	499.67	34.64	534.30	119.49	124.33	128.84	0.0578	30.09	1649.8
500	500/65	54/3.43	7/3.43	498.97	64.68	563.65	153.65	162.70	171.76	0.0578	30.87	1884.0
560	560/40	45/3.98	7/2.65	559.85	38.61	598.46	133.61	139.02	144.04	0.0516	31.83	1847.0
560	560/70	54/3.63	19/2.18	558.85	70.92	629.77	172.57	182.50	192.43	0.0516	32.68	2100.1
630	630/45	45/4.22	7/2.81	629.40	43.41	672.81	150.29	156.37	162.01	0.0459	33.75	2076.5
630	630/80	54/3.85	19/2.31	628.65	79.63	708.27	191.58	202.72	213.08	0.0459	34.65	2361.2
710	710/50	45/4.48	7/2.99	709.35	49.15	758.50	169.63	176.51	182.90	0.0407	35.85	2341.9
710	710/90	54/4.09	19/2.45	709.47	89.57	799.04	215.71	228.25	239.90	0.0407	36.79	2662.4
800	800/35	72/3.76	7/2.51	799.46	34.64	834.10	167.49	172.33	176.84	0.0361	37.61	2479.2
800	800/65	84^3.48	7/3.48	798.97	66.58	865.55	205.24	214.56	223.88	0.0362	38.28	2729.2
800	800/100	54/4.34	19/2.61	798.85	101.65	900.50	243.89	258.12	271.33	0.0362	39.09	3004.1
900	900/40	72/3.99	7/2.66	900.26	38.90	939.16	188.35	193.79	198.85	0.0321	39.90	2791.0
900	900/75	84/3.69	7/3.69	898.30	74.86	973.16	226.34	231.58	244.31	0.0322	40.59	3068.5
1000	1000/45	72/4.21	7/2.80	1002.28	43.10	1045.38	209.14	215.17	220.77	0.0289	42.08	3105.7
1120	1120/50	72/4.45	19/1.78	1119.81	47.28	1167.09	234.52	241.14	247.76	0.0258	44.50	3464.3
1120	1120/90	84/4.12	19/2.47	1119.86	91.04	1210.90	282.99	295.73	307.57	0.0258	45.31	3810.0
1250	1250/50	72/4.70	19/1.88	1249.16	52.74	1301.91	261.71	269.09	276.48	0.0231	47.00	3864.5
1250	1250/100	84/4.35	19/2.61	1248.39	101.65	1350.04	315.89	330.12	343.33	0.0232	47.85	4248.5

Technical details ASTM B232

Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Al	St	Al	St	Total				
	cmil	No/mm	No/mm	mm²	mm²	mm²	kN	Ω/km	mm	kg/km
Thrasher	2312000	76/4.43	19/2.07	1171.42	63.94	1235.36	252	0.0246	45.79	3764
Kiwi	2167000	72/4.41	7/2.94	1099.77	47.52	1147.29	222	0.0262	44.10	3435
Bluebird	2156000	84/4.07	19/2.44	1092.85	88.84	1181.69	268	0.0262	44.76	3740
Chukar	1780000	84/3.70	19/2.22	903.18	73.54	976.72	228	0.0317	40.70	3092
Falcon	1590000	54/4.36	19/2.62	806.23	102.43	908.66	243	0.0353	39.26	3048
Lapwing	1590000	45/4.78	7/3.18	807.53	55.60	863.13	187	0.0354	38.22	2673
Parrot	1510500	54/4.25	19/2.55	766.06	97.03	863.09	231	0.0372	38.25	2894
Nuthatch	1510500	45/4.65	7/3.10	764.20	52.83	817.04	178	0.0374	37.20	2532
Plover	1431000	54/4.14	19/2.48	726.92	91.78	818.70	218	0.0392	37.24	2744
Bobolink	1431000	45/4.53	7/3.02	725.27	50.14	775.41	171	0.0394	36.24	2403
Martin	1351500	54/4.02	19/2.41	685.39	86.67	772.06	206	0.0415	36.17	2588
Dipper	1351500	45/4.40	7/2.93	684.24	47.20	731.44	161	0.0418	35.19	2266
Pheasant	1272000	54/3.90	19/2.34	645.08	81.71	726.79	194	0.0441	35.10	2437

Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Al	St	Al	St	Total				
	cmil	No/mm	No/mm	mm²	mm²	mm²	kN	Ω/km	mm	kg/km
Bittern	1272000	45/4.27	7/2.85	644.41	44.66	689.06	152	0.0443	34.17	2136
Skylark	1272000	36/4.78	1/4.78	646.02	17.95	663.97	117	0.0445	33.46	1922
Grackle	1192500	54/3.77	19/2.27	602.79	76.89	679.69	184	0.0472	33.97	2281
Bunting	1192500	45/4.14	7/2.76	605.76	41.88	647.64	142	0.0472	33.12	2007
Finch	1113000	54/3.65	19/2.19	565.03	71.57	636.60	175	0.0504	32.85	2135
Bluejay	1113000	45/4.00	7/2.66	565.49	38.90	604.39	133	0.0505	31.98	1872
Curlew	1033500	54/3.51	7/3.51	522.52	67.73	590.25	161	0.0542	31.59	1978
Ortolan	1033500	45/3.85	7/2.57	523.87	36.31	560.18	123	0.0546	30.81	1736
Tanager	1033500	36/4.30	1/4.30	522.79	14.52	537.32	94.8	0.0550	30.10	1555
Cardinal	954000	54/3.38	7/3.38	484.53	62.81	547.34	150	0.0585	30.42	1834
Rail	954000	45/3.70	7/2.47	483.85	33.54	517.39	116	0.0591	29.61	1604
Catbird	954000	36/4.14	1/4.14	484.61	13.46	498.07	87.9	0.0593	28.98	1442
Canary	900000	54/3.28	7/3.28	456.28	59.15	515.43	141	0.0621	29.52	1727
Ruddy	900000	45/3.59	7/2.40	455.50	31.67	487.17	109	0.0627	28.74	1510
Mallard	795000	30/4.14	19/2.48	403.84	91.78	495.62	171	0.0693	28.96	1841
Condor	795000	54/3.08	7/3.08	402.33	52.15	454.49	124	0.0704	27.72	1523
Tem	795000	45/3.38	7/2.25	403.77	27.83	431.61	97.5	0.0708	27.03	1337
Drake	795000	26/4.44	7/3.45	402.56	65.44	468.00	140	0.0700	28.11	1627
Cuckoo	795000	24/4.62	7/3.08	402.33	52.15	454.49	124	0.0704	27.72	1523
Coot	795000	36/3.77	1/3.77	401.86	11.16	413.02	72.9	0.0715	26.39	1196
Redwing	715500	30/3.92	19/2.35	362.06	82.41	444.47	154	0.0773	27.43	1651
Starling	715500	26/4.21	7/3.28	361.93	59.15	421.08	126	0.0779	26.68	1466
Stilt	715500	24/4.39	7/2.92	363.27	46.88	410.15	113	0.0780	26.32	1373
Gannet	666600	26/4.07	7/3.16	338.26	54.90	393.16	117	0.0833	25.76	1367
Flamingo	666600	24/4.23	7/2.82	337.27	43.72	380.99	105	0.0840	25.38	1277
Egret	636000	30/3.70	19/2.22	322.56	73.54	396.11	141	0.0868	25.90	1472
Scoter	636000	30/3.70	7/3.70	322.56	75.26	397.83	136	0.0867	25.90	1484
Grosbeak	636000	26/3.97	7/3.09	321.84	52.49	374.34	112	0.0876	25.15	1302
Rook	636000	24/4.14	7/2.76	323.07	41.88	364.95	101	0.0877	24.84	1223
Swift	636000	36/3.38	1/3.38	323.02	8.97	331.99	60.7	0.0890	23.66	961
Kingbird	636000	18/4.78	1/4.78	323.01	17.95	340.96	69.7	0.0890	23.90	1031
Teal	605000	30/3.61	19/2.16	307.06	69.62	376.69	133	0.0912	25.24	1398
Wood Duck	605000	30/3.61	7/3.61	307.06	71.65	378.71	129	0.0911	25.27	1413
Squab	605000	26/3.87	7/3.01	305.83	49.81	355.64	108	0.0922	24.51	1237
Peacock	605000	24/4.03	7/2.69	306.13	39.78	345.92	95.9	0.0925	24.19	1160
Eagle	556500	30/3.46	7/3.46	282.07	65.82	347.89	123	0.0991	24.22	1298
Dove	556500	26/3.72	7/2.89	282.59	45.92	328.50	101	0.0998	23.55	1142
Parakeet	556500	24/3.87	7/2.58	282.31	36.60	318.90	88.3	0.1003	23.22	1069
Osprey	556500	18/4.47	1/4.47	282.47	15.69	298.17	61.0	0.1017	22.35	902
Hen	477000	30/3.20	7/3.20	241.27	56.30	297.57	105	0.1159	22.40	1110
Hawk	477000	26/3.44	7/2.67	241.65	39.19	280.84	86.4	0.1167	21.77	976
Flicker	477000	24/3.58	7/2.39	241.58	31.40	272.99	76.8	0.1172	21.49	915

Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Al	St	Al	St	Total				
	cmil	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
Pelican	477000	18/4.14	1/4.14	242.31	13.46	255.77	52.3	0.1186	20.70	773
Lark	397500	30/2.92	7/2.92	200.90	46.88	247.78	90.3	0.1392	20.44	925
Ibis	397500	26/3.14	7/2.44	201.34	32.73	234.07	72.1	0.1400	19.88	814
Brant	397500	24/3.27	7/2.18	201.56	26.13	227.68	64.7	0.1405	19.62	763
Chickadee	397500	18/3.77	1/3.77	200.93	11.16	212.09	43.4	0.1430	18.85	641
Oriole	336400	30/2.69	7/2.69	170.50	39.78	210.28	77.4	0.1640	18.83	785
Linnet	336400	26/2.89	7/2.25	170.55	27.83	198.39	62.8	0.1653	18.31	690
Merlin	336400	18/3.47	1/3.47	170.22	9.46	179.68	38.2	0.1688	17.35	543
Ostrich	300000	26/Z73	7/2.12	152.19	24.71	176.90	56.6	0.1852	17.28	615
Partridge	266800	26/2.57	7/2.00	134.87	21.99	156.87	50.2	0.2090	16.28	546
Waxwing	266800	18/3.09	1/3.09	134.98	7.50	142.48	30.3	0.2129	15.45	431
Penguin	211600	6/4.77	1/4.77	107.22	17.87	125.09	37.1	0.2667	14.31	433
Cochin	211300	12/3.37	7/3.37	107.04	62.44	169.47	91.8	0.2481	16.85	785
Brahma	203200	16/2.86	19/248	102.79	91.78	194.57	127	0.2478	18.12	1003
Dorking	190800	12/3.20	7/3.20	96.51	56.30	152.81	82.8	0.2751	16.00	707
Dotterel	176900	12/3.08	7/3.08	89.41	52.15	141.56	76.7	0.2970	15.40	655
Pigeon	167800	6/4.25	1/4.25	85.12	14.19	99.30	29.4	0.3359	12.75	344
Guinea	159000	12/2.92	7/2.92	80.36	46.88	127.24	71.1	0.3304	14.60	589
Leghorn	134600	12/2.69	7/2.69	68.20	39.78	107.98	60.7	0.3893	13.45	500
Quai	133100	6/3.78	1/3.78	67.33	11.22	78.55	23.3	0.4247	11.34	272
Minorca	110800	12/2.44	7/2.44	56.11	32.73	88.84	50.2	0.4732	12.20	411
Raven	105600	6/3.37	1/3.37	53.52	8.92	62.44	19.4	0.5343	10.11	216
Petrel	101800	12/2.34	7/2.34	51.61	30.10	81.71	46.2	0.5145	11.70	378
Robin	83690	6/3.00	1/3.00	42.41	7.07	49.48	15.8	0.6742	9.00	171
Grousel	80000	8/254	1/4.24	40.54	14.12	54.66	22.9	0.7089	9.32	222
Sparate	66360	7/2.47	1/3.30	33.54	8.55	42.09	16.1	0.8525	8.24	159
Sparrow	66360	6/2.67	1/2.67	33.59	5.60	39.19	12.7	0.8512	8.01	136
Swanate	41740	7/1.96	1/2.61	21.12	5.35	26.47	10.5	1.3539	6.53	100
Swan	41740	6/2.12	1/2.12	21.18	3.53	24.71	8.30	1.3501	6.36	86
/	33090	6/1.89	1/1.89	16.83	2.81	19.64	6.68	1.6987	5.67	68
Turkey	26240	6/1.68	1/1.68	13.30	2.22	15.52	5.28	2.1499	5.04	54

Technical details ASTM B232

Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
	Al	St	Al	St	Total				
mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
1250	84/4.35	19/2.61	1248.39	101.65	1350.04	306	0.0230	47.85	4274
1250	76/4.58	19/2.14	1252.09	68.34	1320.43	269	0.0230	47.34	4023
1250	72/4.70	7/3.13	1249.16	53.86	1303.02	250	0.0231	46.99	3901
1120	84/4.12	19/2.47	1119.86	91.04	1210.90	275	0.0256	45.31	3833
1120	76/4.33	19/2.02	1119.13	60.89	1180.02	240	0.0257	44.74	3595

Technical details ASTM B232

Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
	Al	St	Al	St	Total				
mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
1120	872/4.45	7/2.97	1119.81	48.50	1168.30	226	0.0257	44.51	3499
1000	84/3.89	19/2.33	998.32	81.01	1079.33	245	0.0287	42.77	3416
1000	72/4.21	7/2.81	1002.28	43.41	1045.69	202	0.0288	42.11	3132
900	84/3.69	19/2.21	898.30	72.88	971.19	226	0.0319	40.57	3073
900	72/3.99	7/2.66	900.26	38.90	939.16	181	0.0320	39.90	2812
800	54/4.34	19/2.60	798.85	100.88	899.72	240	0.0356	39.04	3015
800	45/4.76	7/3.17	800.79	55.25	856.03	186	0.0357	38.07	2652
710	54/4.09	19/2.45	709.47	89.57	799.04	213	0.0401	36.79	2678
710	45/4.48	7/2.99	709.35	49.15	758.50	167	0.0403	35.85	2351
630	54/3.85	19/231	628.65	79.63	708.27	189	0.0453	34.65	2375
630	45/4.22	7/2.81	629.40	43.41	672.81	148	0.0454	33.75	2084
560	54/3.63	19/218	558.85	70.92	629.77	173	0.0509	32.68	2112
560	45/3.98	7/2.65	559.85	38.61	598.46	132	0.0511	31.83	1854
500	54/3.43	7/3.43	498.97	64.68	563.65	154	0.0568	30.87	1889
500	45/3.76	7/2.51	499.67	34.64	534.30	118	0.0572	30.09	1656
450	54/3.26	7/3.26	450.73	58.43	509.16	139	0.0628	29.34	1706
450	45/3.57	7/2.38	450.44	31.14	481.58	108	0.0634	28.56	1492
400	30/4.12	19/2.47	399.95	91.04	490.99	170	0.0700	28.83	1824
400	26/4.43	7/3.45	400.75	65.44	466.19	139	0.0703	28.07	1622
400	24/4.61	7/3.07	400.59	51.82	452.41	123	0.0707	27.65	1515
355	30/3.88	19/233	354.71	81.01	435.73	151	0.0789	27.17	1620
355	26/4.17	7/3.24	355.09	57.71	412.80	123	0.0794	26.40	1435
355	24/4.34	7/2.89	355.04	45.92	400.96	111	0.0798	26.03	1343
315	30/3.66	19/2.20	315.63	72.23	387.85	138	0.0887	25.64	1443
315	26/3.93	7/3.06	315.39	51.46	366.87	110	0.0894	24.90	1277
315	24/4.09	7/2.73	315.32	40.97	356.29	98.7	0.0898	24.55	1194
315	18/4.72	1/4.72	314.95	17.50	332.45	68.0	0.0912	23.60	1005
280	30/3.45	7/3.45	280.45	65.44	345.88	122	0.0997	24.15	1291
280	26/3.70	7/2.88	279.56	45.60	325.16	100	0.1008	23.44	1131
280	24/3.85	7/2.57	279.40	36.31	315.71	87.5	0.1014	23.11	1058
280	18/4.45	1/4.45	279.95	15.55	295.50	60.4	0.1026	22.25	893
250	30/3.26	7/3.26	250.41	58.43	308.84	109	0.1117	22.82	1152
250	26/3.50	7/2.72	250.15	40.67	290.82	89.5	0.1127	22.16	1011
250	24^3.64	7/2.43	249.75	32.46	282.21	79.4	0.1134	21.85	946
250	18/4.21	1/4.21	250.57	13.92	264.49	54.1	0.1147	21.05	800
224	30/3.08	7^3.08	223.52	52.15	275.67	97.4	0.1251	21.56	1029
224	26/3.31	7/2.57	223.73	36.31	260.04	80.0	0.1260	20.95	904
224	24/3.45	7/2.30	224.36	29.08	253.44	72.0	0.1262	20.70	849
224	18/3.98	1/3.98	223.94	12.44	236.38	46.3	0.1283	19.90	715
200	30/2.91	7/2.91	199.53	46.56	246.08	89.7	0.1402	20.37	918
200	26/3.13	7/2.43	200.06	32.46	232.52	71.5	0.1409	19.81	808
200	2473.26	7/2.17	200.33	25.89	226.21	64.2	0.1414	19.55	758

Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
	Al	St	Al	St	Total				
mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
200	18/3.76	1/3.76	199.87	11.10	210.97	43.1	00.1438	18.80	638
180	30/2.76	7/2.76	179.49	41.88	221.37	80.7	0.1558	19.32	826
180	26/2.97	7/2.31	180.13	29.34	209.46	65.4	0.1565	18.81	729
180	24/3.09	7/2.06	179.98	23.33	203.31	57.8	0.1574	18.54	681
180	18/3.57	1/3.57	180.18	10.01	190.19	40.4	0.1595	17.85	575
160	30/2.61	7/2.61	160.51	37.45	197.96	72.9	0.1742	18.27	739
160	26/2.80	7/2.18	160.10	26.13	186.22	58.9	0.1761	17.74	648
160	24/2.91	7/1.94	159.62	20.69	180.31	52.0	0.1775	17.46	604
160	18/3.36	1/3.36	159.60	8.87	168.47	35.8	0.1800	16.80	509
140	26/2.62	7/2.04	140.17	22.88	163.05	52.2	0.2011	16.60	567
140	24^2.73	7/1.82	140.48	18.21	158.70	46.4	0.2016	16.38	532
140	18/3.15	1/3.15	140.28	7.79	148.07	31.5	0.2048	15.75	448
125	26/2.47	7/1.92	124.58	20.27	144.85	46.9	0.2263	15.64	504
125	24^2.58	7/1.72	125.47	16.26	141.74	41.5	0.2258	15.4«	475
125	18/2.97	1/2.97	124.70	6.93	131.63	28.8	0.2304	14.85	398
100	16/2.82	19/2.44	99.93	88.84	188.78	123	0.2550	17.84	972
100	12/3.26	7/3.26	100.16	58.43	158.59	85.9	0.2651	16.30	734
100	6/4.61	1/4.61	100.15	16.69	116.84	34.6	0.2855	13.83	405
90	12/3.09	7/3.09	89.99	52.49	142.48	77.2	0.2950	15.45	660
80	12/2.91	7/2.91	79.81	46.56	126.37	70.6	0.3327	14.55	585
80	6/4.12	1/4.12	79.99	13.33	93.32	27.6	0.3575	12.36	323
71	12/2.74	7/2.74	70.76	41.28	112.03	62.9	0.3752	13.70	519
63	12/2.59	7/2.59	63.22	36.88	100.10	56.2	0.4200	12.95	463
63	6/3.66	1/3.66	63.13	10.52	73.65	22.1	0.4530	10.98	255
56	12/2.44	7/2.44	56.11	32.73	88.84	50.2	0.4732	12.20	411
50	12/2.30	7/2.30	49.86	29.08	78.94	45.4	0.5325	11.50	365
50	6/3.26	1/3.26	50.08	8.35	58.43	18.1	0.5710	9.78	202
40	8/2.52	1/4.20	39.90	13.85	53.76	22.5	0.7202	9.24	218
40	6/2.91	1/2.91	39.91	6.65	46.56	14.9	0.7166	8.73	161
31.5	7/2.39	1/3.19	31.40	7.99	39.40	15.1	0.9105	7.97	148
31.5	6/2.59	1/2.59	31.61	5.27	36.88	11.9	0.9046	7.77	128
25	7/2.13	1/2.84	24.94	6.33	31.28	12.3	1.1464	7.10	118
25	6/2.30	1/2.30	24.93	4.15	29.08	9.7	1.1471	6.90	101
20	7/1.91	1/2.55	20.06	5.11	25.16	10.0	1.4257	6.37	95
20	6/2.06	1/2.06	20.00	3.33	23.33	7.84	1.4299	6.18	81
16	6/1.84	1/1.84	15.95	2.66	18.61	6.33	1.7923	5.52	65
12.5	6/1.63	1/1.63	12.52	2.09	14.61	4.97	2.2838	4.89	51

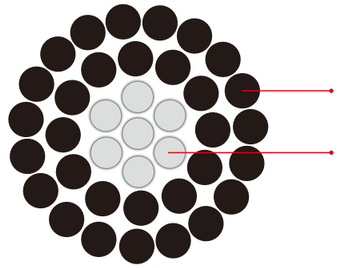
Technical details EN 50182

New code	Old code	Calculated area		No.			Diameter			Approx weight	Overall diameter	DC resistance at 20 °C
		Al	St	Total	Al	St	Al	St	Conductor			
-	-	mm^2	mm^2	mm^2	-	-	mm	mm	mm	kg/km	mm	Ω/km
15-AL1/3-ST1A	16/2.5	15.27	2.54	17.81	6	1	1.80	1.80	5.40	61.6	5.80	1.8769
24-AL1/4-ST1A	25/4	23.86	3.98	27.83	6	1	2.25	2.25	6.75	96.3	8.95	1.2012
34-AL1/6-ST1A	35/6	34.35	5.73	40.08	6	1	2.70	2.70	8.10	138.7	12.37	0.8342
44-AL1/32-ST1A	44/32	43.98	31.67	75.65	14	7	2.00	2.40	11.20	369.3	44.24	0.6574
48-AL1/8-ST1A	50/8	48.25	8.04	56.30	6	1	3.20	3.20	9.60	194.8	16.81	0.5939
51-AL1/30-ST1A	50/30	51.17	29.85	81.01	12	7	2.33	2.33	11.65	374.7	42.98	0.5644
70-AL1/11-ST1A	70/12	69.89	11.40	81.29	26	7	1.85	1.44	11.72	282.2	26.27	0.4132
94-AL1/15-ST1A	95/15	94.39	15.33	109.73	26	7	2.15	1.67	13.61	380.6	34.93	0.3060
97-AL1/56-ST1A	95/55	96.51	56.30	152.81	12	7	3.20	3.20	16.00	706.8	77.85	0.2992
106-AL1/76-ST1A	105/75	105.67	75.55	181.21	14	19	3.10	2.25	17.45	885.3	105.82	0.2742
122-AL1/20-ST1A	120/20	121.57	19.85	141.42	26	7	2.44	1.90	15.46	491.0	44.50	0.2376
122-AL1/71-ST1A	120/70	122.15	71.25	193.40	12	7	3.60	3.60	18.00	894.5	97.92	0.2364
128-AL1/30-ST1A	125/30	127.92	29.85	157.76	30	7	2.33	2.33	16.31	587.0	56.41	0.2260
149-AL1/24-ST1A	150/25	148.86	24.25	173.11	26	7	2.70	2.10	17.10	600.8	53.67	0.1940
172-AL1/40-ST1A	170/40	171.77	40.08	211.85	30	7	2.70	2.70	18.90	788.2	74.89	0.1683
184-AL1/30-ST1A	185/30	183.78	29.85	213.63	26	7	3.00	2.33	18.99	741.0	65.27	0.1571
209-AL1/34-ST1A	210/35	209.10	34.09	243.19	26	7	3.20	2.49	20.27	844.1	73.36	0.1381
212-AL1/49-ST1A	210/50	212.06	49.48	261.54	30	7	3.00	3.00	21.00	973.1	92.46	0.1363
231-AL1/30-ST1A	230/30	230.91	29.85	260.75	24	7	3.50	2.33	20.99	870.9	72.13	0.1250
243-AL1/39-ST1A	240/40	243.05	39.49	282.54	26	7	3.45	2.68	21.84	980.1	85.12	0.1188
264-AL1/34-ST1A	265/35	263.66	34.09	297.75	24	7	3.74	2.49	22.43	994.4	81.04	0.1095
304-AL1/49-ST1A	300/50	304.26	49.48	353.74	26	7	3.86	3.00	24.44	1227.3	105.09	0.0949
305-AL1/39-ST1A	305/40	304.62	39.49	344.10	54	7	2.68	2.68	24.12	1151.2	96.80	0.0949
339-AL1/30-ST1A	340/30	339.3	29.8	369.1	48	7	3.00	2.33	24.99	1171.2	91.71	0.0852
382-AL1/49-ST1A	380/50	381.70	49.48	431.18	54	7	3.00	3.00	27.00	1442.5	121.30	0.0758
386-AL1/34-ST1A	385/35	386.04	34.09	420.13	48	7	3.20	2.49	26.67	1333.6	102.56	0.0749
434-AL1/56-ST1A	435/55	434.29	56.30	490.59	54	7	3.20	3.20	28.80	1641.3	133.59	0.0666
449-AL1/39-ST1A	450/40	448.71	39.49	488.20	48	7	3.45	2.68	28.74	1549.1	119.05	0.0644
490-AL1/64-ST1A	490/65	490.28	63.55	553.83	54	7	3.40	3.40	30.60	1852.9	150.81	0.0590
494-AL1/34-ST1A	495/35	494.36	34.09	528.45	45	7	3.74	2.49	29.91	1632.6	117.96	0.0584
511-AL1/45-ST1A	510/45	510.54	45.28	555.82	48	7	3.68	2.87	30.69	1765.3	133.31	0.0566
550-AL1/71-ST1A	550/70	549.65	71.25	620.91	54	7	3.60	3.60	32.40	2077.3	166.32	0.0526
562-AL1/49-ST1A	560/50	561.70	49.46	611.18	48	7	3.86	3.00	32.16	1939.5	146.28	0.0515
571-AL1/39-ST1A	570/40	571.16	39.49	610.64	45	7	4.02	2.68	32.16	1887.1	136.40	0.0506
653-AL1/45-ST1A	650/45	653.49	45.28	698.78	45	7	4.30	2.87	34.41	2159.9	156.18	0.0442
679-AL1/86-ST1A	680/85	678.59	85.95	764.54	54	19	4.00	2.40	36.00	2549.7	206.56	0.0426
1046-AL1/45-ST1A	1045/45	1045.59	45.28	1090.87	72	7	4.30	2.87	43.01	3246.2	218.92	0.0277

New code	Old code	Calculated area		No.			Diameter			Approx weight	Overall diameter	DC resistance at 20 °C
		Al	St	Total	Al	St	Al	St	Conductor			
-	-	mm^2	mm^2	mm^2	-	-	mm	mm	mm	kg/km	mm	Ω/km
11-AL1/2-ST1A	MOLE	10.6	1.8	12.4	6	1	1.50	1.50	4.50	42.8	4.14	2.7027
21-AL1/3-ST1A	SQUIRREL	21.0	3.5	24.5	6	1	2.11	2.11	6.33	84.7	7.87	1.3659
26-AL1/4-ST1A	GOPHER	26.2	4.4	30.6	6	1	2.36	2.36	7.08	106.0	9.58	1.0918
32-AL1/5-ST1A	WEASEL	31.6	5.3	36.9	6	1	2.59	2.59	7.77	127.6	11.38	0.9065
37-AL1/6-ST1A	FOX	36.7	6.1	42.8	6	1	2.79	2.79	8.37	148.1	13.21	0.7812
42-AL1/7-ST1A	FERRET	42.4	7.1	49.5	6	1	3.00	3.00	9.00	171.2	15.27	0.6757
53-AL1/9-ST1A	RABBIT	52.9	8.8	61.7	6	1	3.35	3.35	10.05	213.5	18.42	0.5419
63-AL1/11-ST1A	MINK	63.1	10.5	73.6	6	1	3.66	3.66	10.98	254.9	21.67	0.4540
63-AL1/37-ST1A	SKUNK	63.2	36.9	100.1	12	7	2.59	2.59	12.95	463.0	52.79	0.4568
75-AL1/13-ST1A	BEAVER	75.0	12.5	87.5	6	1	3.99	3.99	11.97	302.9	25.76	0.3820
73-AL1/43-ST1A	HORSE	73.4	42.8	116.2	12	7	2.79	2.79	13.95	537.3	61.26	0.3936
79-AL1/13-ST1A	RACOON	78.8	13.1	92.0	6	1	4.09	4.09	12.27	318.3	27.06	0.3635
84-AL1/14-ST1A	OTTER	83.9	14.0	97.9	6	1	4.22	4.22	12.66	338.8	28.81	0.3415
95-AL1/16-ST1A	CAT	95.4	15.9	111.3	6	1	4.50	4.50	13.50	385.3	32.76	0.3003
105-AL1/17-ST1A	HARE	105.0	17.5	122.5	6	1	4.72	4.72	14.16	423.8	36.04	0.2730
105-AL1/14-ST1A	DOG	105.0	13.6	118.5	6	7	4.72	1.57	14.15	394.0	32.65	0.2733
132-AL1/20ST1A	COYOTE	131.7	20.1	151.8	26	7	2.54	1.91	15.89	520.7	45.86	0.2192
132-AL1/7-ST1A	COUGAR	131.5	7.3	138.8	18	1	3.05	3.05	15.25	418.8	29.74	0.2188
131-AL1/31-ST1A	TIGER	131.2	30.6	161.9	30	7	2.36	2.36	16.52	602.2	57.87	0.2202
158-AL1/37-ST1A	WOLF	158.1	36.9	194.9	30	7	2.59	2.59	18.13	725.3	68.91	0.1829
159-AL1/9-ST1A	DINGO	158.7	8.8	167.5	18	1	3.35	3.35	16.75	505.2	35.87	0.1814
183-AL1/43-ST1A	LYNX	183.4	42.8	226.2	30	7	2.79	2.79	19.53	841.6	79.97	0.1576
184-AL1/10-ST1A	CARACAL	184.2	10.2	194.5	18	1	3.61	3.61	18.05	586.7	40.74	0.1562
212-AL1/49-ST1A	PANTHER	212.1	49.5	261.5	30	7	3.00	3.00	21.00	973.1	92.46	0.1363
211-AL1/12-ST1A	JAGUAR	210.6	11.7	222.3	18	1	3.86	3.86	19.30	670.8	46.57	0.1366
238-AL1/56-ST1A	LION	238.3	55.6	293.9	30	7	3.18	3.18	22.26	1093.4	100.47	0.1213
264-AL1/62-ST1A	BEAR	264.4	61.7	326.1	30	7	3.35	3.35	23.45	1213.4	111.50	0.1093
324-AL1/76-ST1A	GOAT	324.3	75.7	400.0	30	7	3.71	3.71	25.97	^A88.2	135.13	0.0891
375-AL1/88-ST1A	SHEEP	375.1	87.5	462.6	30	7	3.99	3.99	27.93	1721.3	156.30	0.0771
374-AL1/48-ST1A	ANTELOPE	374.1	48.5	422.6	54	7	2.97	2.97	26.73	1413.8	118.88	0.0773
382-AL1/49-STIA	BISON	381.7	49.5	431.2	54	7	3.00	3.00	27.00	1442.5	121.30	0.0758
430-AL1/100-ST1A	DEER	429.6	100.2	529.8	30	7	4.27	4.27	29.89	1971.4	179.00	0.0673
429-AL1/56-ST1A	ZEBRA	428.9	55.6	454.5	54	7	3.18	3.18	28.62	1620.8	131.92	0.0674
477-AL1/111-ST1A	ELK	477.1	111.3	588.5	30	7	4.50	4.50	31.50	2189.5	198.80	0.0606
476-AL1/62-ST1A	CAMEL	476.0	61.7	537.7	54	7	3.35	3.35	30.15	1798.8	146.40	0.0608
528-AL1/69-ST1A	MOOSE	528.5	68.5	597.0	54	7	3.53	3.53	31.77	1997.3	159.92	0.0547

Aluminum conductors, aluminum-clad steel reinforced (ACSR/AS)

Standards: I EC ASTM





Application

It is used for overhead power transm ission and distribution line.

Construction

Stranded with the aluminum-clad steel wires and aluminum wires

Features

Has better conduct perform ance, excellent tensile strength and good m echanic property. Compared with common steel core stranded aluminum wire, It has no electro-chemical reaction problem, so it will have long use life.

Description

Technical details ASTM B549

Code number	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
	Al	ACS	Al	ACS	Total				
-	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
16	6/1.81	1/1.81	15	2.57	17.6	5.94	1.8337	5.43	59.4
25	6/2.26	1/2.26	24	4.01	28.0	9.02	1.1472	6.78	92.7
40	6/2.85	1/2.85	38	6.38	44.4	14.16	0.7244	8.55	147.4
63	6/3.58	1/3.58	60	10.1	70.1	21.14	0.4588	10.70	232.6
100	6/4.51	1/4.51	96	16.0	112	31.80	0.2869	13.50	369.1
125	18/2.95	1/2.95	123	6.83	130	29.11	0.2309	14.80	384.0
125	26/2.43	7/1.89	121	19.6	141	44.67	0.2291	15.40	462.6
160	18/3.34	1/3.34	158	8.8	167	36.36	0.1798	16.70	492.2
160	26/2.74	7/2.13	153	24.9	178	55.99	0.1812	17.40	588.0
200	18/3.74	1/3.74	198	11.0	209	43.73	0.1434	18.70	617.2
200	26/3.07	7/2.39	192	31.4	223	69.44	0.1444	19.50	738.7
250	22/3.76	7/2.09	244	24.0	268	67.90	0.1153	21.30	831.9

Code number	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
	Al	ACS	Al	ACS	Total				
-	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
250	26/3.43	7/2.67	240	39.2	279	86.67	0.1155	21.70	922.1
315	45/2.96	7/1.97	310	21.3	331	78.25	0.0916	23.70	995.9
315	26/3.85	7/2.99	303	49.2	352	107.41	0.0915	24.40	1160.2
400	45/3.34	7/2.22	394	27.1	421	97.57	0.0721	26.70	1267.7
400	54/3.02	7/3.02	387	50.1	437	123.99	0.0723	27.20	1400.5
450	45/3.54	7/2.36	443	30.6	474	107.61	0.0641	28.30	1425.2
450	54/3.21	7/3.21	437	56.7	494	140.09	0.0641	28.90	1582.3
500	45/3.73	7/2.49	492	34.1	526	119.58	0.0577	29.90	1582.9
500	54/3.38	7/3.38	465	62.8	548	154.06	0.0577	30.40	1754.4
560	45/3.95	7/2.63	551	38.0	589	133.87	0.0515	31.60	1773.8
560	54/3.58	19/2.15	544	69.0	613	169.75	0.0515	32.20	1959.9
630	45/4.19	7/2.79	620	42.8	663	150.64	0.0458	33.50	1996.0
630	54/3.79	19/2.28	609	77.6	687	190.56	0.0460	34.10	2198.3
710	45/4.44	7/2.96	697	48.2	745	169.28	0.0407	35.50	2241.9
710	54/4.03	19/2.42	689	87.4	776	215.08	0.0407	36.30	2483.4
800	72/3.74	7/2.49	791	34.1	825	167.46	0.0362	37.40	2410.8
800	84/3.45	7/3.45	785	65.4	850	206.79	0.0361	38.00	2604.2
800	54/4.28	19/2.57	777	98.6	876	242.58	0.0361	38.50	2801.0
900	72/3.97	7/2.65	891	38.6	930	188.93	0.0321	39.70	2717.7
900	8473.66	7/3.66	884	73.7	958	222.42	0.0321	40.30	2930.8
1000	72/4.18	7/2.79	988	42.8	1031	209.45	0.0290	41.80	3012.9
1120	72/4.43	19/1.77	1110	46.8	1157	233.66	0.0258	44.30	3376.4
1120	84/4.08	19/2.45	1098	89.6	1188	283.20	0.0258	44.90	3631.2
1250	72/4.68	19/1.87	1239	52.2	1291	260.78	0.0231	46.80	3768.2
1250	84/4.31	19/2.59	1226	100	1326	316.20	0.0231	47.40	4053.0

Technical details ASTM B549

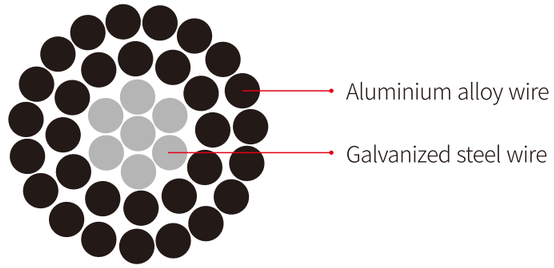
Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Al	ACS	Al	ACS	Total				
	cmil	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
Thrasher	2312000	76/4.430	19/2.068	1171.42	63.82	1235.24	246	0.0243	45.78	3687
Kiwi	2167000	72/4.407	7/2.939	1098.27	47.49	1145.76	218	0.0260	44.07	3374
Bluebird	2156000	84/4.069	19/2.441	1092.31	88.92	1181.23	262	0.0258	44.76	3633
Chukar	1780000	8473.698	19/2.220	902.20	73.54	975.75	221	0.0313	40.68	3001
Falcon	1590000	54/4.359	19/2.616	805.86	102.12	907.98	236	0.0345	39.23	2922
Lapwing	1590000	45/4.775	7ai83	805.84	55.70	861.54	185	0.0350	38.20	2603
Parrot	1510500	54/4.247	19/2.548	764.98	96.88	861.86	224	0.0364	38.22	2774
Nuthatch	1510500	45/4.653	7/3.101	765.19	52.87	818.06	176	0.0369	37.22	2471
Plover	1431000	54/4.135	19/2.482	725.16	91.93	817.09	212	0.0384	37.22	2630

Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Al	ACS	Al	ACS	Total				
	cmil	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
Bobolink	1431000	45/4.529	7/3.020	724.95	50.14	775.09	167	0.0389	36.23	2342
Martin	1351500	54/4.018	19/2.410	684.71	86.67	771.38	200	0.0406	36.16	2482
Dipper	1351500	45/4.402	7/2.934	684.86	47.33	732.19	158	0.0412	35.21	2212
Pheasant	1272000	5473.899	19/2.339	644.75	81.64	726.39	188	0.0431	35.09	2338
Bittern	1272000	45/4.270	7/2.847	644.41	44.56	688.97	148	0.0438	34.16	2082
Skylark	1272000	36/4.775	1/4.775	644.67	17.91	662.58	114	0.0442	33.43	1897
Grackle	1192500	5473.774	192266	604.07	76.62	680.70	177	0.0460	33.97	2191
Bunting	1192500	45/4.135	7/2.756	604.30	41.76	646.06	139	0.0467	33.08	1952
Finch	1113000	5473.647	19/2.189	564.10	71.50	635.61	167	0.0493	32.83	2046
Bluejay	1113000	45/3.995	7/2.664	564.08	39.02	603.09	130	0.0500	31.96	1822
Curlew	1033500	54/3.513	7/3.513	523.41	67.85	591.26	155	0.0528	31.62	1900
Ortolan	1033500	45/3.848	7/2.565	523.33	36.17	559.50	120	0.0539	30.78	1690
Tanager	1033500	36/4.303	1/4.303	523.52	14.54	538.07	93.5	0.0544	30.12	1540
Cardinal	954000	54^3.376	7/3.376	483.38	62.66	546.04	145	0.0572	30.38	1755
Rail	954000	45/3.698	7/2.466	463.32	33.43	516.76	113	0.0584	29.59	1561
Catbird	954000	36/4.135	1/4.135	483.44	13.43	496.87	86.4	0.0589	28.95	1422
Canary	900000	54^3.279	7/3.279	456.00	59.11	515.11	137	0.0607	29.51	1655
Ruddy	900000	45/3.592	7/2.395	456.01	31.54	487.55	107	0.0619	28.74	1473
Mallard	795000	30/4.135	19/2.482	402.87	91.93	494.80	165	0.0667	28.95	1729
Condor	795000	5473.081	7/3.081	402.59	52.19	454.78	123	0.0687	27.73	1462
Tem	795000	45/3.376	7/2.250	402.82	27.83	430.65	94.5	0.0700	27.01	1301
Drake	795000	26/4.442	7/3.454	402.92	65.59	468.51	136	0.0679	28.13	1551
Cuckoo	795000	24/4.623	7/3.081	402.86	52.19	455.04	122	0.0687	27.74	1462
Coot	795000	36/3.774	1/3.774	402.71	11.19	413.90	72.3	0.0707	26.42	1185
Redwing	715500	30/3.922	19/2.352	362.43	82.55	444.98	148	0.0741	27.45	1555
Starling	715500	26/4.214	7/3.277	362.62	59.04	421.66	122	0.0755	26.69	1396
Stilt	715500	24/4.387	7/2.924	362.78	47.00	409.78	110	0.0762	26.32	1317
Gannet	666600	26/4.067	7/3.162	337.76	54.97	392.73	115	0.0810	25.75	1300
Flamingo	666600	24/4.234	7/2.822	337.91	43.78	381.69	103	0.0819	25.40	1227
Egret	636000	30/3.698	19/2.220	322.22	73.54	395.76	133	0.0834	25.89	1383
Scoter	636000	30/3.698	7/3.698	322.22	75.18	397.40	131	0.0832	25.89	1393
Grosbeak	636000	26/3.973	7/3.089	322.33	52.46	374.79	110	0.0849	25.16	1241
Rook	636000	24/4.135	7/2.756	322.29	41.76	364.05	97.8	0.0858	24.81	1170
Swift	636000	36/3.376	1/3.376	322.25	8.95	331.21	59.9	0.0883	23.63	948
Kingbird	636000	18/4.775	1/4.775	322.34	17.91	340.24	66.7	0.0875	23.88	1007
Teal	605000	30/3.607	19/2.164	306.55	69.88	376.43	127	0.0876	25.25	1315
Wood Duck	605000	30/3.607	7/3.607	306.55	71.53	378.08	127	0.0875	25.25	1325
Squab	605000	26/3.874	7/3.012	306.47	49.88	356.34	105	0.0893	24.53	1180
Peacock	605000	24/4.034	7/2.690	306.74	39.78	346.53	93.1	0.0902	24.21	1114
Eagle	556500	30/3.459	7/3.459	281.91	65.78	347.69	119	0.0951	24.21	1219
Dove	556500	26/3.716	7/2.891	281.98	45.95	327.93	97.8	0.0970	23.54	1086

Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Al	ACS	Al	ACS	Total				
	cmil	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
Parakeet	556500	24/3.868	7/2.578	282.02	36.54	318.56	85.6	0.0981	23.21	1024
Osprey	556500	18/4.465	1/4.465	281.84	15.66	297.50	58.8	0.1001	22.33	881
Hen	477000	30/3.203	7/3.203	241.73	56.40	298.13	104	0.1109	22.42	1045
Hawk	477000	26/3.439	7/2.675	241.51	39.34	280.85	83.7	0.1133	21.78	930
Flicker	477000	24/3.581	7/2.388	241.72	31.35	273.07	74.5	0.1144	21.49	878
Pelican	477000	18/4.135	1/4.135	241.72	13.43	255.15	50.9	0.1167	20.68	755
Lark	397500	30/2.924	7/2.924	201.45	47.00	248.45	87.2	0.1331	20.47	871
Ibis	397500	26/3.139	7/2.441	201.21	32.76	233.97	69.7	0.1360	19.88	775
Brant	397500	24/3.269	7/2.179	201.43	26.10	227.54	62.1	0.1373	19.61	731
Chickadee	397500	18/3.774	1/3.774	201.36	11.19	212.54	42.7	0.1401	18.87	629
Oriole	336400	30/2.690	7/2.690	170.50	39.78	210.28	74.6	0.1573	18.83	737
Linnet	336400	26/2.888	7/2.245	170.32	27.71	198.03	59.8	0.1607	18.29	656
Merlin	336400	18/3.472	1/3.472	170.42	9.47	179.89	37.6	0.1655	17.36	533
Ostrich	300000	26/2.728	7^2.121	151.97	24.73	176.70	54.1	0.1801	17.28	585
Partridge	266800	26/2.573	7/2.002	135.19	22.04	157.22	48.1	0.2024	16.30	521
Waxwing	266800	18/3.091	1/3.091	135.07	7.50	142.57	30.0	0.2088	15.46	422
Penguin	211600	6/4.770	1/4.770	107.22	17.87	125.09	34.1	0.2525	14.31	412
Pigeon	167800	6/4.247	1/4.247	85.00	14.17	99.16	28.0	0.3185	12.74	327
Quail	133100	6/3.782	1/3.782	67.40	11.23	78.64	22.6	0.4017	11.35	259
Raven	105600	6/3.371	1/3.371	53.55	8.93	62.48	18.8	0.5056	10.11	206
Robin	83690	6/3.000	1/3.000	42.41	7.07	49.48	15.3	0.6384	9.00	163
Sparate	66360	7/2.474	1/3.299	33.65	8.55	42.20	15.6	0.7827	8.25	149
Sparrow	66360	6/2.672	1/2.672	33.64	5.61	39.25	12.3	0.8048	8.02	129
Swallow	52620	6/2.380	1/2.380	26.69	4.45	31.14	9.89	1.0143	7.14	103
Swanate	41740	7/1.961	1/2.614	21.14	5.37	26.51	10.2	1.2459	6.54	93
Swan	41740	6/2.118	1/2.118	21.14	3.52	24.66	7.93	1.2807	6.35	81

Aluminum alloy conductors, steel reinforced (AACSR)

Standards: IEC ASTM. BS EN





Application

It is used for overhead power transmission and distribution line.

Construction

The center wire or wires are galvanized steel and the outer layer or layers are alum inum alloy 6201.

Features

Has better performance of conductivity excellent tensile strength and good mechanic property.

Description

Technical details Technical details Type B IEC 61089

Code number	Size of conductor	Structure		Calculated area			Rated strength			DC resistance at 20 °C	Overall diameter	Approx weight
		Alloy	St	Alloy	St	Total	S1A	S2A	S3A			
-	mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	kN	kN	Ω/km	mm	kg/km
16	18/3	6/1.98	1/1.98	18.5	3.08	21.6	9.03	9.46	9.89	1.7934	5.94	74.6
25	30/5	6/2.47	1/2.47	28.7	4.79	33.5	13.96	14.63	15.25	1.1477	7.41	116.6
40	A0f7	6/3.13	1/3.13	46.2	7.69	53.9	22.03	23.11	24.19	0.7173	9.39	186.6
63	70/12	6/3.92	1/3.92	72.4	12.1	84.5	34.66	35.51	37.56	0.4555	11.76	293.5
100	115/6	18/285	1/2.85	115	6.38	121	41.20	42.09	42.92	0.2880	14.25	366.8
125	145/8	18/3.19	1/3.19	144	7.99	152	51.27	52.39	53.51	0.2304	15.95	458.7
125	145/23	26/2.65	7/2.06	143	23.3	166	69.78	73.04	76.31	0.2310	16.78	579.2
160	185/10	18/3.61	1/3.61	184	10.2	194	65.54	66.26	68.00	0.1800	18.05	586.9
160	185/30	26/3.00	7/2.34	184	30.1	214	88.60	92.81	96.73	0.1805	19.02	743.0
200	230/13	18/4.04	1/4.04	231	12.8	244	81.95	82.85	85.03	0.1440	20.20	734.0
200	230/38	26/3.36	7/2.61	231	37.5	269	110.54	115.79	120.66	0.1444	21.27	927.6
250	290/28	22/4.08	7/2.27	288	28.3	316	117.26	121.22	124.90	0.1154	23.13	1014.0

Code number	Size of conductor	Structure		Calculated area			Rated strength			DC resistance at 20 °C	Overall diameter	Approx weight
		Alloy	St	Alloy	St	Total	S1A	S2A	S3A			
-	mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	kN	kN	Ω/km	mm	kg/km
250	290/45	26/3.75	7/2.92	287	46.9	334	138.40	144.96	151.06	0.1155	23.76	1159.9
315	365/25	45/3.20	7/2.14	362	25.2	387	136.54	140.07	143.59	0.0917	25.62	1197.3
315	365/60	26/4.21	7/3.28	362	59.1	421	172.15	180.43	188.71	0.0917	26.68	1462.0
400	460/30	45/3.61	7/2.41	461	31.9	493	172.10	176.57	180.72	0.0722	28.89	1520.3
400	460/60	54/3.29	7/3.29	459	59.5	519	201.16	209.49	217.82	0.0723	29.61	1737.0
450	520/35	45/3.83	7/2.55	518	35.7	554	193.56	198.57	203.22	0.0642	30.63	1708.8
450	520/67	54/3.49	7/3.49	517	67.0	584	226.47	235.85	245.22	0.0643	31.41	1954.1
500	575/40	45/4.04	7/2.69	577	39.8	617	214.98	220.55	225.72	0.0578	32.31	1899.3
500	575/75	54/3.68	7/3.68	574	74.5	649	251.52	256.74	269.39	0.0578	33.12	2171.8
560	645/45	45/4.27	7/2.85	644	44.7	689	241.18	247.43	253.24	0.0516	34.17	2127.9
560	645/80	54/3.90	19/2.34	645	81.7	727	283.42	294.86	305.49	0.0516	35.10	2421.3
630	725/30	72/3.58	7/2.39	725	31.4	756	249.68	254.07	258.15	0.0459	35.81	2248.6
630	725/90	54/4.13	19/2.48	723	91.8	815	318.50	331.35	343.28	0.0459	37.18	2722.9
710	820/35	72/3.80	7/2.53	817	35.2	852	281.13	286.06	290.63	0.0407	37.99	2532.6
710	820/100	54/4.39	19/2.63	817	103.2	920	358.68	373.13	386.55	0.0407	39.49	3067.1
800	920/40	72/4.04	7/2.69	923	39.8	963	317.05	322.62	327.79	0.0361	40.39	2854.4
800	920/75	8473.74	7/3.74	923	76.9	1000	356.29	361.67	374.74	0.0362	41.14	3146.5
900	1040/45	72/4.28	7/2.85	1036	44.7	1081	356.53	362.78	368.58	0.0321	42.79	3210.4
900	1040/85	84/3.96	7/3.96	1035	86.2	1121	400.46	406.49	421.15	0.0322	43.56	3537.4
1000	1150/95	84/4.18	19/2.51	1153	94.0	1247	446.72	459.88	472.10	0.0289	45.99	3919.1
1120	130Q/105	84/4.42	19/2.65	1289	105	1394	499.72	514.39	528.01	0.0258	48.61	4385.4

Technical details Type A IEC 61089

Code number	Size of conductor	Structure		Calculated area			Rated strength			DC resistance at 20 °C	Overall diameter	Approx weight
		Alloy	St	Alloy	St	Total	S1A	S2A	S3A			
-	mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	kN	kN	Ω/km	mm	kg/km
16	18/3	6/1.99	1/1.99	18.7	3.11	21.8	9.68	10.12	10.55	17934	5.97	75.4
25	30/5	6/2.48	1/2.48	29.0	4.83	33.8	14.93	15.61	16.24	1.1477	7.44	117.5
40	40/7	6/3.14	1/3.14	46.5	7.74	54.2	23.63	24.71	25.80	0.7173	9.42	188.3
63	70/12	6/3.94	1/3.94	73.2	12.2	85.4	36.47	37.32	39.40	0.4555	11.82	296.4
100	115/6	18/2.87	V2.87	116	6.47	122	45.07	45.98	46.82	0.2880	14.35	370.5
125	145/8	18/3.21	1/3.21	146	8.09	154	56.03	57.16	58.29	0.2304	16.05	463.1
125	145/23	26/2.67	712.07	146	23.6	170	74.69	77.99	81.28	0.2310	16.89	584.6
160	185/10	18/3.63	1/3.63	186	10.3	196	69.97	70.70	72.46	0.1800	18.15	592.8
160	185/30	26/3.02	7/2.35	186	30.4	216	95.06	99.31	103.26	0.1805	19.13	750.0
200	230/13	18/4.05	1/4.05	232	12.9	245	87.25	88.15	90.34	0.1440	20.25	740.6
200	230/38	26/3.37	7/2.62	232	37.7	270	118.42	123.71	128.61	0.1444	21.34	935.9
250	290/28	22/4.10	7/2.28	290	28.6	319	123.93	127.93	131.65	0.1154	23.24	1023.7

Code number	Size of conductor	Structure		Calculated area			Rated strength			DC resistance at 20 °C	Overall diameter	Approx weight
		Alloy	St	Alloy	St	Total	S1A	S2A	S3A			
-	mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	kN	kN	Ω/km	mm	kg/km
250	290/45	26/3.77	7/2.93	290	47.2	337	145.16	151.76	157.90	0.1155	23.87	1170.1
315	365/25	45/3.22	7/2.15	366	25.4	391	148.68	152.24	155.80	0.0917	25.77	1208.8
315	365/60	26/4.23	7/3.29	365	59.5	425	180.75	189.08	197.41	0.0917	26.79	1474.5
400	460/30	45/3.63	7/2.42	466	32.2	498	183.18	187.69	191.87	0.0722	29.04	1534.5
400	460/60	54/3.31	7/3.31	465	60.2	525	217.38	225.82	234.25	0.0723	29.79	1754.8
450	520/35	45/3.85	7/2.56	524	36.0	560	205.82	210.86	215.55	0.0642	30.78	1724.8
450	520/67	54/3.51	7/3.51	523	67.7	591	239.25	243.99	255.51	0.0643	31.59	1973.9
500	575/40	45/4.05	7(210	580	40.1	620	228.71	234.32	239.53	0.0578	32.40	1916.9
500	575/75	54/3.70	7/3.70	581	75.3	656	265.81	271.07	283.87	0.0578	33.30	2193.4
560	645/45	45/4.29	7/2.86	650	45.0	695	256.33	262.63	268.47	0.0516	34.32	2147.5
560	645/80	54/3.92	19/2.35	652	82.4	734	299.01	310.55	321.26	0.0516	35.27	2443.9
630	725/30	72/3.60	7/2.40	733	31.7	765	266.68	271.11	275.23	0.0459	36.00	2269.7
630	725/90	54/4.15	19/2.49	730	92.5	823	336.05	349.01	361.04	0.0459	37.35	2747.9
710	820/35	72/3.82	7/2.55	825	35.7	861	300.63	305.63	310.28	0.0407	38.21	2558.5
710	820/100	54/4.41	19/2.65	825	105	930	379.34	394.01	407.63	0.0407	39.71	3101.0
800	920/40	72/4.05	7/2.70	928	40.1	968	338.64	344.25	349.46	0.0361	40.50	2881.1
800	920/75	84/3.75	7/3.75	928	77.3	1005	377.99	383.41	396.55	0.0362	41.25	3174.0
900	1040/45	72/4.30	7/2.87	1046	45.3	1091	381.11	387.45	393.34	0.0321	43.01	3242.7
900	1040/85	84/3.98	7/3.98	1045	87.1	1132	425.29	431.38	446.19	0.0322	43.78	3571.7
1000	1150/95	84/4.20	19/2.52	1164	94.8	1259	474.06	487.33	499.65	0.0289	46.20	3955.3
1120	1300/105	84/4.44	19/2.66	1301	106	1407	530.18	544.97	558.69	0.0258	48.82	4425.6

Technical details ASTM B711

Size of conductor	Number and diameter of wires		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
	Alloy	St	Alloy	St	Total				
mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
1250/102	84/4.35	19/2.61	1248.39	101.65	1350.04	487	0.0271	47.85	4250
1120/91	84/4.12	19/2.47	1119.86	91.04	1210.90	437	0.0302	45.31	3811
1000/81	84/3.89	19/2.33	998.32	81.01	1079.33	389	0.0339	42.77	3396
900/73	8473.69	19/2.21	898.30	72.88	971.19	353	0.0377	40.57	3056
800/101	54/4.34	19/2.60	798.85	100.88	899.72	361	0.0423	39.04	3003
710/90	54/4.09	19/2.45	709.47	89.57	799.04	321	0.0477	36.79	2667
630/80	54/3.85	19/2.31	628.65	79.63	708.27	285	0.0538	34.65	2365
560/71	54/3.63	19/2.18	558.85	70.92	629.77	256	0.0605	32.68	2104
500/63	54/3.43	19/2.06	498.97	63.33	562.29	228	0.0678	30.88	1878
450/59	54/3.26	19/1.98	450.73	58.50	509.24	208	0.0750	29.46	1707
400/91	30/4.12	19/2.47	399.95	91.04	490.99	237	0.0844	28.83	1818
400/65	26/4.43	7/3.45	400.75	65.44	466.19	206	0.0840	28.07	1616

Size of conductor	Number and diameter of wires		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
	Alloy	St	Alloy	St	Total				
mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
355/81	30/3.88	19/2.33	354.71	81.01	435.73	210	0.0951	27.17	1615
355/58	26/4.17	7/3.24	355.09	57.71	412.80	182	0.0948	26.40	1430
315/72	30/3.66	19/2.20	315.63	72.23	387.85	190	0.1069	25.64	1438
315/52	26/3.93	7/3.06	315.39	51.48	366.87	162	0.1067	24.90	1272
280/65	30/3.45	7/3.45	280.45	65.44	345.88	171	0.1203	24.15	1286
280/46	26/3.70	7/2.88	279.56	45.60	325.16	144	0.1204	23.44	1127
250/58	30/3.26	7/3.26	250.41	58.43	308.84	152	0.1348	22.82	1149
250/41	26/3.50	7/2.72	250.15	40.67	290.82	128	0.1346	22.16	1007
224/52	30/3.08	7/3.08	223.52	52.15	275.67	139	0.1510	21.56	1025
224/36	26/3.31	7/2.57	223.73	36.31	260.04	115	0.1505	20.95	901
200/47	30/2.91	7/2.91	199.53	46.56	246.08	124	0.1691	20.37	915
200/32	26/3.13	7/2.43	200.06	32.46	232.52	105	0.1683	19.81	805
180/42	30/2.76	7/2.76	179.49	41.88	221.37	112	0.1880	19.32	823
180/29	26/2.97	7/2.31	180.13	29.34	209.46	95.0	0.1869	18.81	726
160/38	30/2.61	7/2.61	160.51	37.45	197.96	100	0.2102	18.27	736
160/26	26/2.80	7/2.18	160.10	26.13	186.22	85.5	0.2103	17.74	646
140/33	30/2.44	7/2.44	140.28	32.73	173.01	87.4	0.2405	17.08	643
140/23	26/2.62	7/2.04	140.17	22.88	163.05	74.9	0.2402	16.60	565

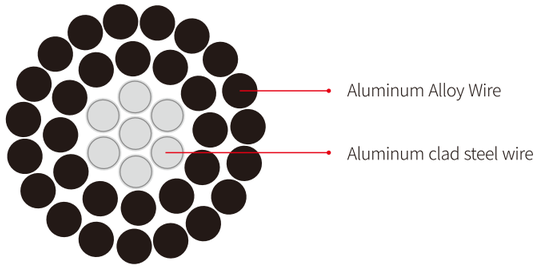
Technical details EN 50182

New code	Old code	Calculated area			No.		Diameter			Approx weight	Rated strength	DC resistance at 20°C
		Alloy	St	Conductor	Alloy	St	Alloy	St	Conductor			
-	-	mm^2	mm^2	mm^2	-	-	mm	mm	mm	kg/km	mm	Ω/km
34-AL3/6-ST1A	35/6	34.35	5.73	40.08	6	1	2.70	2.70	8.10	138.7	16.66	0.9601
48-AL3/8-ST1A	50/8	48.25	8.04	56.30	6	1	3.20	3.2	9.60	194.8	23.08	0.6835
70-AL3/11-ST1A	70/12	69.89	11.40	81.29	26	7	1.85	1.44	11.72	282.2	33.96	0.4756
94-AL3/22-ST1A	94^22	94.25	21.99	116.24	30	7	2.00	2.00	14.00	432.5	53.53	0.3530
94-AL3/15-ST1A	95/15	94.39	15.33	109.73	26	7	2.15	1.67	13.61	380.6	45.79	0.3521
97-AL3/34-ST1A	95/34	96.77	34.36	131.13	36	7	1.85	2.50	14.90	536.5	67.72	0.3441
122-AL3/20-ST1A	120/20	121.57	19.85	141.42	26	7	2.44	1.90	15.46	491.0	59.09	0.2734
119-AL3/42-ST1A	120/42	118.82	41.58	160.40	36	7	2.05	2.75	16.45	653.9	82.45	0.2803
128-AL3/30-ST1A	125/30	127.92	29.85	157.76	30	7	2.33	2.33	16.31	587.0	71.76	0.2601
149-AL3/24-ST1A	150/25	148.86	24.25	173.11	26	7	2.70	2.10	17.10	600.8	72.28	0.2233
150-AL3/53-ST1A	150/53	149.57	52.83	202.41	36	7	2.30	3.10	18.50	827.1	102.24	0.2226
172-AL3/40-ST1A	170/40	171.77	40.08	211.85	30	7	2.70	2.70	18.90	788.2	96.36	0.1937
184-AL3/30-ST1A	185/30	183.78	29.85	213.63	26	7	3.00	2.33	18.99	741.0	88.24	0.1809
209-AL3/34-ST1A	210/35	209.10	34.09	243.19	26	7	3.20	2.49	20.27	844.1	100.54	0.1590
212-AL3/49-ST1A	210/50	212.06	49.48	261.54	30	7	3.00	3.00	21.00	973.1	118.96	0.1569
243-AL3/39-ST1A	240/40	243.05	39.49	282.54	26	7	3.45	2.68	21.84	980.1	116.72	0.1368
238-AL3/82-ST1A	240/80	237.79	82.41	320.20	36	19	2.90	2.35	23.35	1305.3	164.09	0.1402

New code	Old code	Calculated area			No.		Diameter			Approx weight	Rated strength	DC resistance at 20°C
		Alloy	St	Conductor	Alloy	St	Alloy	St	Conductor			
-	-	mm^2	mm^2	mm^2	-	-	mm	mm	mm	kg/km	mm	Ω/km
257-AL3/60-ST1A	257/60	256.59	59.87	316.46	30	7	3.30	3.30	23.10	1177.5	141.55	0.1296
304-AL3/49-ST1A	300/50	304.26	49.48	353.74	26	7	3.86	3.00	24.44	1227.3	146.16	0.1092
341-AL3/109-ST1A	340/110	341.20	108.79	449.99	78	19	2.36	2.70	32.38	1797.4	224.67	0.0976
382-AL3/49-ST1A	380/50	381.70	49.48	431.18	54	7	3.00	3.00	27.00	1442.5	169.01	0.0872
449-AL3/39-ST1A	450/40	448.71	39.49	488.20	48	7	3.45	2.68	28.74	1549.1	177.39	0.0741
562-AL3/39-ST1A	560/50	561.70	49.48	611.18	48	7	3.86	3.00	32.16	1939.6	222.11	0.0592
679-AL3/86-ST1A	680/85	678.59	85.95	764.54	54	19	4.00	2.40	36.00	2549.7	298.17	0.0490

Aluminum alloy conductors, aluminum-clad steel reinforced (AACSR/AS)

Standards: IEC





Application

It is used for overhead power transmission and distribution line.

Construction

Stranded with aluminum-clad steel wires
aluminum alloy wires

Features

Has better performance of conductivity, excellent tensile strength and good mechanic property. Compared with common steel core stranded aluminum wire, It has no electro-chemical reaction problem, so it will have long use life.

Description

Technical details Type B IEC 61089

Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Alloy	ACS	Alloy	ACS	Total				
	mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
16	15/5	6/1.93	1/1.93	17.6	2.93	20.5	8.69	1.7632	5.79	67.6
25	25/5	6/2.41	1/2.41	27.4	4.56	32.0	13.55	1.1326	7.23	105.4
40	45/10	6/3.05	1/3.05	43.8	7.31	51.1	21.70	0.7084	9.15	168.9
63	70/10	6/3.83	1/3.83	69.1	11.52	80.6	33.07	0.4491	11.5	266.2
100	110/20	6/4.83	1/4.83	110	18.32	128	50.75	0.2821	14.5	423.2
125	140/10	18/3.16	1/3.16	141	7.84	149	51.05	0.2301	15.8	440.6
125	135/20	26/2.59	7/2.02	137	22.4	159	67.33	0.2280	16.4	526.2
160	180/10	18/3.58	1/3.58	181	10.1	191	64.93	0.1793	17.9	565.5
160	175/30	26/2.93	7/2.28	175	28.6	204	86.01	0.1785	18.6	672.8
200	227/10	18/4.00	1/4.00	226	12.6	239	80.56	0.1436	20.0	706.0
200	220/35	26/3.28	7/2.55	220	35.8	256	107.71	0.1421	20.8	842.6
250	280/30	22/4.02	7/2.24	279	27.6	307	115.48	0.1146	22.8	951.9
250	275/45	26/3.67	7/2.85	275	44.7	320	134.73	0.1136	23.2	1054.2
315	355/25	45/3.17	7/2.11	355	24.5	380	134.15	0.0912	25.4	1142.3
315	345/55	26/4.12	7/3.20	347	56.3	403	169.81	0.0901	26.1	1328.7
400	450/30	45/3.57	7/2.38	450	31.1	481	170.25	0.0720	28.6	1449.4
400	445/60	54/3.23	7/3.23	442	57.4	499	199.36	0.0717	29.1	1602.1
450	560/35	45/3.79	7/2.53	508	35.2	543	191.99	0.0637	30.3	1634.2
450	500/65	54/3.43	7/3.43	499	64.7	564	223.52	0.0635	30.9	1806.7
500	565/40	45/4.00	7/2.66	565	38.9	604	213.50	0.0573	32.0	1818.4
500	555/70	5473.62	7/3.62	556	72.1	628	246.09	0.0570	32.6	2012.5
560	630/45	45/4.23	7/2.82	632	43.7	676	239.02	0.0512	33.8	2034.9
560	630/75	5473.83	19/2.30	622	78.9	701	278.26	0.0510	34.5	2243.1
630	710/50	45/4.49	7/2.99	713	49.2	762	269.17	0.0454	35.9	2292.0
630	700/90	54/4.06	19/2.44	699	88.8	788	312.84	0.0454	36.6	2521.6
710	800/55	45/4.76	7/3.17	801	55.3	856	302.53	0.0404	38.1	2576.0
710	790/100	54/4.31	19/2.59	788	100	888	352.53	0.0403	38.8	2841.4
800	910/40	72/4.01	7/2.67	909	39.2	948	315.27	0.0360	40.1	2771.5
800	900/75	84/3.69	7/3.69	898	74.9	973	347.34	0.0359	40.6	2979.0
800	890/115	54/4.58	19/2.75	890	113	1003	397.86	0.0356	41.2	3207.4
900	1025/45	72/4.25	7/2.84	1021	44.3	1065	354.52	0.0321	42.5	3115.3
900	1015/85	84/3.92	7/3.92	1014	84.5	1099	391.99	0.0318	43.1	3362.0
1000	1140/50	72/4.48	7/2.99	1135	49.2	1184	393.79	0.0288	44.8	3460.8
1120	1275/55	72/4.75	19/1.90	1276	53.9	1330	441.03	0.0257	47.5	3882.5
1120	1260/100	84/4.37	19/2.62	1260	102	1362	494.58	0.0256	48.1	4163.5
1250	1420/60	72/5.01	19/2.01	1419	60.3	1479	491.07	0.0231	50.1	4321.6
1250	1405/115	84/4.62	19/2.77	1408	115	1523	552.81	0.0229	50.8	4653.7

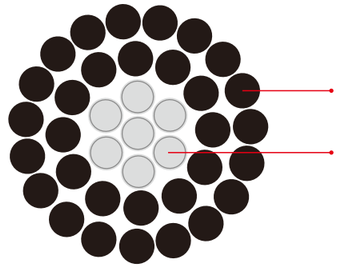
Technical details Type A IEC 61089

Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Alloy	ACS	Alloy	ACS	Total				
	mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
16	15/5	6/1.94	1/1.94	17.7	2.96	20.7	9.32	1.7684	5.82	68.3
25	25/5	6/2.42	1/2.42	27.6	4.60	32.2	14.49	1.1343	7.26	106.3
40	45/10	6/3.07	1/3.07	44.4	7.40	51.8	23.31	0.7051	9.21	171.0
63	70/10	6/3.85	1/3.85	69.9	11.64	81.5	34.81	0.4479	11.6	269.0
100	110/20	6/4.85	1/4.85	111	18.47	129	53.39	0.2821	14.6	426.7
125	140/20	18/3.18	1/3.18	143	7.94	151	55.99	0.2290	15.9	446.1
125	135/20	26/2.61	7/2.03	139	22.7	162	72.40	0.2268	16.5	533.7
160	180/10	18/3.60	1/3.60	183	10.2	193	69.32	0.1790	18.0	571.9
160	180/30	26/2.95	7/2.29	178	28.8	207	92.35	0.1772	18.7	681.0
200	230/15	18/4.02	1/4.02	228	12.7	241	85.92	0.1436	20.1	713.1

Code number	Size of conductor	Structure		Calculated area			Rated strength	DC resistance at 20°C	Overall diameter	Approx weight
		Alloy	ACS	Alloy	ACS	Total				
	mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	kN	Ω/km	mm	kg/km
200	220/35	26/3.30	7/2.56	222	36.0	258	115.51	0.1420	20.9	851.9
250	280/30	22/4.04	7/2.25	282	27.8	310	122.23	0.1144	22.9	961.2
250	275/45	26/3.69	7/2.87	278	45.3	323	141.92	0.1134	23.4	1066.7
315	360/25	45/3.19	7/2.12	360	24.7	385	146.54	0.0908	25.5	1156.2
315	350/55	26/4.14	7/3.22	350	57.0	407	178.65	0.0901	26.2	1342.6
400	455/30	45/3.59	7/2.39	456	31.4	487	181.16	0.0717	28.7	1465.1
400	450/60	54/3.25	7/3.25	448	58.1	506	215.27	0.0714	29.3	1622.0
450	515/35	45/3.81	7/2.54	513	35.5	549	204.17	0.0637	30.5	1650.9
450	505/65	54/3.45	7/3.45	505	65.4	570	241.28	0.0633	31.1	1827.8
500	570/40	45/4.01	7/2.68	568	39.5	608	226.41	0.0575	32.1	1830.1
500	560/70	54/3.63	7/3.63	559	72.4	631	258.62	0.0572	32.7	2023.5
560	640/45	45/4.25	7/2.83	638	44.0	682	253.93	0.0512	34.0	2053.5
560	630/80	54/3.85	19/2.31	629	79.6	709	293.58	0.0509	34.7	2265.7
630	720/50	45/4.51	7/3.00	719	49.5	769	285.82	0.0455	36.1	2311.8
630	705/90	54/4.08	19/2.45	706	89.6	796	329.87	0.0453	36.7	2545.4
710	810/55	45/4.78	7/3.19	808	56.0	864	321.51	0.0404	38.3	2599.3
710	800/100	54/4.33	19/2.60	795	101	896	371.53	0.0403	39.0	2866.9
800	920/40	72/4.03	7/2.69	918	39.8	958	337.03	0.0360	40.3	2800.5
800	910/75	84/371	7/3.71	908	75.7	984	369.28	0.0359	40.8	3011.4
800	900/115	54/4.60	19/Z76	897	114	1011	419.09	0.0357	41.4	3234.4
900	1035/45	72/4.27	7/2.85	1031	44.7	1076	378.37	0.0320	42.7	3144.0
900	1020/85	84/3.93	7/3.93	1019	84.9	1104	414.37	0.0319	43.2	3379.2
1000	1150/50	72/4.50	7/3.00	1145	49.5	1195	420.09	0.0289	45.0	3491.0
1120	1290/55	72/4.77	19/1.91	1287	54.4	1341	470.62	0.0257	47.7	3916.1
1120	1270/105	84/4.39	19/2.63	1271	103	1374	524.37	0.0256	48.3	4200.8
1250	1435/60	72/5.04	19/2.01	1436	60.3	1496	524.82	0.0230	50.4	4368.7
1250	1420/115	84/4.64	19/2.78	1420	115	1535	585.82	0.0229	51.0	4693.0

Thermal resistant aluminum alloy conductors stee reinforced (TACSR)

Standards: IEC





Application

Thermal resistant aluminum alloy conductor is used in the reform of urban and rural line, as so to update the electric capacity, save the cost.

Construction

Stranded with steel wires and thermal resistant aluminum alloy wires.

Features

Thermal resistant aluminum alloy conductor has large carrying capacity, the maximum operating temperature can reach up to 150°C.

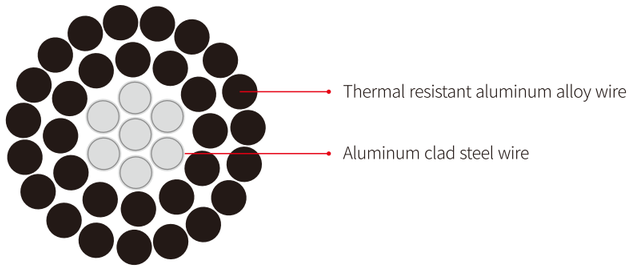
Description

Technical details IEC 62004

Size of conductor	Structure		Calculated area			Overall diameter	Approx weight	Rated strength			DC resistance at 20°C
	AT1	St	AT1	St	Total			G1A	G2A	G3A	
mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	mm	kg/km	kN	kN	kN	Ω/km
150/20	24/2.78	7/1.85	145.68	18.82	164.49	16.67	548.5	46.20	46.83	51.47	0.2014
185/30	26/2.98	7/2.32	181.34	29.59	210.93	18.88	731.4	63.11	67.25	71.10	0.1619
240/30	24/3.60	7/2.40	244.29	31.67	275.96	21.60	920.7	75.68	80.11	84.23	0.1201
240/40	26/3.42	7/2.66	238.85	38.90	277.75	21.66	962.7	83.04	88.49	93.54	0.1229
300/25	48/2.85	7/2.22	306.21	27.10	333.31	23.76	1057.0	82.53	86.33	90.12	0.0959
300/40	24/3.99	7/2.66	300.09	38.90	338.99	23.94	1131.0	92.06	97.51	102.56	0.0977
300/50	26/3.83	7/2.98	299.54	48.82	348.37	24.26	1207.7	103.29	110.12	116.47	0.0980
400/25	45/3.33	7/2.22	391.91	27.10	419.01	26.64	1293.5	95.19	98.99	102.78	0.0750
400/35	48/3.22	7/2.50	390.88	34.36	425.24	26.82	1347.5	102.49	107.31	111.77	0.0752
400/50	54/3.07	7/3.07	399.73	51.82	451.54	27.63	1509.3	121.75	129.01	136.26	0.0736
400/65	26/4.42	7/3.44	398.94	65.06	464.00	28.00	1608.7	135.00	144.10	153.21	0.0736
400/95	30/4.16	19/2.50	407.75	93.27	501.02	29.14	1854.3	171.16	184.21	196.34	0.0719
500/35	45/3.76	7/2.51	499.67	34.64	534.30	30.09	1649.8	120.43	125.28	129.78	0.0588
500/45	48/3.60	7/2.80	棚.58	43.10	531.68	30.00	1685.5	128.29	134.32	139.93	0.0601
500/65	54/3.44	7/3.44	501.88	65.06	566.94	30.96	1895.0	152.87	161.98	171.09	0.0586
630/45	45/4.22	7/2.81	629.40	43.41	672.81	33.75	2076.5	149.56	155.64	161.28	0.0467
630/55	48/4.12	7/3.20	639.92	56.30	696.22	34.32	2206.4	163.67	171.56	179.44	0.0459
630/80	54/3.83	19/2.30	622.13	78.94	701.07	34.48	2337.8	188.91	199.96	210.23	0.0473
720/50	45/4.53	7/3.02	725.27	50.14	775.41	36.24	2393.7	170.47	177.49	184.51	0.0405
800/55	45/4.80	7/3.20	814.30	56.30	870.60	38.40	2687.5	191.40	199.28	207.16	0.0361
800/70	48/4.63	7/3.60	808.15	71.25	879.41	38.58	2787.6	206.87	211.86	223.97	0.0364
900/75	84/3.69	7/3.69	898.30	74.86	973.16	40.59	3068.5	227.87	233.11	245.84	0.0328
1440/120	84/4.67	19/2.80	1438.81	116.99	1555.80	51.36	4895.2	362.14	378.52	393.73	0.0205

Thermal resistant aluminum alloy conductors, aluminum- lad steel reinforced (TACSR/AS)

Standards: lEC





Application

Thermal resistant aluminum alloy conductor is used in the reform of urban and rural line, as so to update the electric capacity, save the cost.

Construction

Stranded with aluminum-clad steel wires and thermal resistant aluminum allov wires.

Features

Thermal resistant aluminum alloy conductor has large carrying capacity, the maximum operating temperature can reach up to 150°C. And it can reduce the amount of use tower and saving the cost of transmission line.

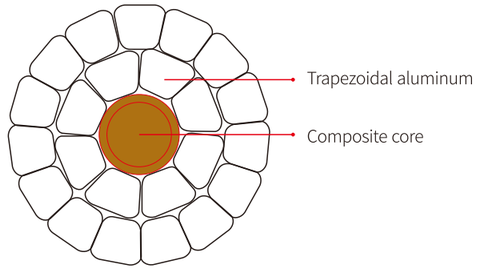
Description

Technical details IEC62004

Size of conductor	Structure		Calculated area			Overall diameter	Approx weight	Rated strength	DC resistance at 20°C
	AT1	ACS	AT1	ACS	Total				
mm^2	No/mm	No/mm	mm^2	mm^2	mm^2	mm	kg/km	kN	Ω/km
150/20	24/2.78	7/1.85	145.68	18.82	164.49	16.67	526.1	46.77	0.1924
185/30	26/2.98	7/2.32	181.34	29.59	210.93	18.88	696.0	64.89	0.1535
240/30	24/3.60	7/2.40	244.29	31.67	275.96	21.60	882.9	77.58	0.1151
240/40	26/3.42	7/2.66	238.85	38.90	277.75	21.66	916.3	85.37	0.1163
300/25	46/2.85	7/2.22	306.21	27.10	333.31	23.76	1024.7	83.35	0.0932
300/40	24/3.99	7/2.66	300.09	38.90	338.99	23.94	1084.6	94.39	0.0936
300/50	26/3.83	7/2.98	299.54	48.82	348.37	24.26	1149.3	106.21	0.0927
400/25	45/3.33	7/2.22	391.91	27.10	419.01	26.64	1261.2	96.01	0.0732
400/35	48/3.22	7/2.50	390.88	34.36	425.24	26.82	1306.4	104.55	0.0729
400/50	54/3.07	7/3.07	399.73	51.82	451.54	27.63	1447.4	126.94	0.0704
400/65	26/4.42	7/3.44	398.94	65.06	464.00	28.00	1531.0	140.20	0.0697
400/95	30/4.16	19/2.50	407.75	93.27	501.02	29.14	1742.5	176.76	0.0666
500/35	45/3.76	7/2.51	499.67	34.64	534.30	30.09	1608.5	122.51	0.0574
500/45	48/3.60	7/2.80	488.58	43.10	531.68	30.00	1634.0	130.87	0.0583
500/65	54/3.44	7/3.44	501.88	65.06	566.94	30.96	1817.2	158.08	0.0561
630/45	45/4.22	7/2.81	629.40	43.41	672.81	33.75	2024.6	152.17	0.0456
630/55	48/4.12	7/3.20	639.92	56.30	696.22	34.32	2139.1	169.31	0.0446
630/80	54/3.83	19/2.30	622.13	78.94	701.07	34.48	2243.1	193.65	0.0453
720/50	45/4.53	7/3.02	725.27	50.14	775.41	36.24	2333.7	175.49	0.0396
800/55	45/4.80	7/3.20	814.30	56.30	870.60	38.40	2620.2	197.03	0.0352
800/70	48/4.63	7/3.60	808.15	71.25	879.41	38.58	2702.5	209.72	0.0353
900/75	84/3.69	7/3.69	898.30	74.86	973.16	40.59	2979.0	227.87	0.0319
1440/120	84/4.67	19/2.80	1438.81	116.99	1555.80	51.36	4754.9	369.16	0.0199

Aluminum conductor, carbon fiber core reinforced (JLRX1/F)

Standards:lECASTM,GB





Application

It is widely used in remoulding the old transmission lines and building the new transmission lines. And also is the ideal product to take place of the Donventinal overhead bare onductors.

Construction

Stranded with the composite core and annealed trapezoidal aluminum wires.

Features

The maximum allowable operating temperature of Aluminum conductors composite core can reach up to 150°C. Compared with conventional conductors, it has he advantages of light weight, high tensile, low loss, heat-resistant, low sag and large current carrying capacity to ensure the energy saving, environmental protection and safety during transmission.

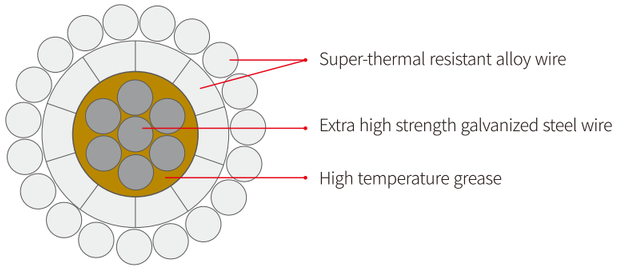
Description

Technical details GB/T 32502

Size of conductor	Diameter		Al	Calculated area			Rated strength	Approx weight	DC resistance at 20°C
	Core	Conductor		Al	Core	Total			
mm^2	mm	mm	No.	mm^2	mm^2	mm^2	kN	kg/km	Ω/km
150/25	6.0	15.54	15	150	28.3	178.3	69.7	468.6	0.1861
150/35	7.0	15.95	15	150	38.5	188.5	91.7	488.3	0.1861
185/25	6.0	17.01	16	185	28.3	213.3	71.7	565.4	0.1509
185/30	6.5	17.19	16	185	33.2	218.2	82.3	574.9	0.1509
210/35	7.0	18.34	16	210	38.5	248.5	95.2	653.9	0.1329
210/50	8.0	18.75	16	210	50.3	260.3	120.6	676.7	0.1329
240/30	6.5	19.26	16	240	33.2	273.2	85.5	725.8	0.1163
240/40	7.5	19.62	16	240	44.2	284.2	109.2	747.0	0.1163
300/25	6.0	21.14	16	300	28.3	328.3	78.4	883.1	0.0931
300/40	7.5	21.61	16	300	44.2	344.2	112.7	913.7	0.0931
300/50	8.0	21.79	16	300	50.3	350.3	125.8	925.5	0.0931
300/70	9.5	22.38	16	300	70.9	370.9	170.3	965.3	0.0931
400/35	7.0	24.43	22	400	38.5	438.5	106.1	1176.4	0.0698
400/40	7.5	24.57	22	400	44.2	444.2	118.4	1187.4	0.0698
400/50	8.0	24.73	22	400	50.3	450.3	131.6	1199.2	0.0698
400/70	9.5	25.26	22	400	70.9	470.9	176.0	1238.9	0.0698
500/35	7.0	27.08	22	500	38.5	538.5	111.9	1453.0	0.0558
500/50	8.0	27.36	22	500	50.3	550.3	137.3	1475.8	0.0558
500/70	9.5	27.84	22	500	70.9	570.9	181.8	1515.5	0.0558
630/40	7.5	30.31	36	630	44.2	674.2	131.7	1830.8	0.0445
630/55	8.5	30.57	36	630	56.7	686.7	158.6	1854.9	0.0445
800/55	8.5	34.17	36	800	56.7	856.7	168.4	2326.7	0.0351
800/70	9.5	34.43	36	800	70.9	870.9	199.1	2354.1	0.0351

Gap type super-thermal resistant aluminum alloy conductora, extra high strength steel reinforced (GZTACSR)

Standards: IEC, GB



Application

GZTACSR is widely used in capacity-increasing project of transmission lines.

Construction

Stranded with the extra high strength steel wires and super-thermal resistant aluminum alloy wires.

Features

The current carrying capacity of GZTACSR at 150°C is 1.6 times than thatoftheACSRat70°C.
The current carrying capacity of GZTACSR at 210°C is twice than that of theACSRat70°C.

Description

Technical details Q/320584-PBZ 001

Size of conductor	Old code		Wire		Conductor		DC resistance at 20°C	Approx weight
	AT3	EST	Construction I	Construction II	Conductor	Steel		
mm^2	-	-	-	-	-	-	Ω/km	kg/km
185/30	197.6	31.67	19.7	18.7	81.1	50.5	0.1483	801
240/30	250.6	31.67	20.6	20.6	89.7	50.5	0.1170	948
260/40	265.3	43.11	22.6	21.7	109.3	68.7	0.1106	1084
300/40	290.2	43.11	23.7	22.4	113.2	68.7	0.1010	1147
370/40	370.5	40.08	26.0	24.8	121	63.8	0.0792	1348
400/50	408.3	49.48	27.5	26.1	141.6	78.8	0.0718	1523
450/50	444.71	49.48	28.4	27.2	147.4	78.8	0.0660	1644
500/60	523.5	63.55	31.2	29.5	183.3	101.2	0.0560	1951
630/50	642.7	52.83	34.0	32	186	84.2	0.0456	2195

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DR Congo

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Kenya

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Uganda

Zambia

America Region

Argentina

Bolivia

Chile

Colombia

Ecuador

Mexico

Peru

Asia Pacific Region

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Bengladesh

Cambodia

India

Indonesia

Malaysia

Myanmar

Nepel

Pakistan

Philippines

Singapore

Sri Lanka

Taiwan, China

Thailand

Vietnam

Brazil Hengtong

Brazil

Middle East and North Africa Region

Algeria

Dubai (Bay sea area)

Egypt

Jordan

Lebanon

Morocco (West Africa&North Africa Region)

Europe Region

Baltic

Georgia

Italy

Poland

Serbia

Turkey

Ukraine

Russia Region

Russia

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